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1898-99

THE NORTH CAROLINA

COLLEGE OF AGRICULTURE

AND

MECHANIC ARTS.

Catalogue 1898-'99.

RALEIGH.

COLLEGE AND GROUNDS.

TENTH ANNUAL CATALOGUE

OF THE

NORTH CAROLINA COLLEGE

OF

AGRICULTURE AND MECHANIC ARTS,

RALEIGH.

1898-'99.

FIRST TERM BEGINS WEDNESDAY, SEPTEMBER 1, 1899.

RALEIGH:
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1899.

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HISTORY.

The Colleges of Agriculture and Mechanic Arts now doing such useful work in the United States were established by the States largely as the result of the liberality of the General Government, which, in 1862, passed a law by which each State in the Union received public lands in proportion equal to thirty thousand acres for each Senator and Representative in Congress "for the endowment, support, and maintenance of at least one college, whose leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts. * * * in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

In 1887 the Legislature of North Carolina decided that the funds arising from this act should go to this College, and ground for the institution having been given by the late R. S. Pullen, of Raleigh, the work of putting up a suitable building was finished in 1889, and the College opened its doors the first day of October of that year.

In 1890 what is known as the "Supplemental Morrill Bill" was passed by Congress. This bill makes a direct yearly appropriation from the United States Treasury to each State that maintains an Agricultural and Mechanical College.

From these two acts the College gets about two-thirds of its annual income—the other third is supplied by State appropriation. In 1889 the new institution began its work with five members in its faculty and with one building. In the eight years since elapsing, the faculty has grown to twenty-three members and the buildings have increased to twelve.

LOCATION.

The College is situated on a commanding eminence on the Hillsboro road, one of the principal highways into Raleigh, three-fourths of a mile west of the city limit. The site is in all respects a suitable one. The ground slopes away from the buildings, giving opportunity for perfect drainage, thus securing this additional requisite of healthful surroundings.

TABULAR ALMANAC.

1898.

JULY.

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10	11	12	13	**14**	15	16
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31	--	--	--	--	--	--

AUGUST.

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1899.

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AUGUST.

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1900.

JANUARY.

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FEBRUARY.

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MARCH.

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18	19	**20**	21	22	23	24
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APRIL.

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MAY.

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COLLEGE CALENDAR.

1898.

Thursday,	July	14,	Examination for admission at county-seats
Thursday,	September	8,	by county supervisors.
Wednesday,	August	31,	Examination at the College for admission.
Thursday,	September	1,	First Term begins; Registration Day.
Thursday,	November	24,	Thanksgiving Day.
Thursday,	December	22,	First Term ends.

1899.

Tuesday,	January	3,	Second Term begins; Registration Day.
Monday,	February	13,	Announcement of Subjects of Theses.
Friday,	March	17,	Second Term ends.
Tuesday,	March	21,	Third Term begins; Registration Day.
Friday,	May	19,	Last Day for submitting Theses.
Friday,	May	26,	Senior Examinations end.
Friday,	June	2,	Examinations end.
Sunday,	June	4,	Baccalaureate Sermon.
Tuesday,	June	6,	Annual Oration.
Wednesday,	June	7,	Commencement Day.
Thursday,	July	13,	Examination for admission at county-seats by county superintendents of schools.
Tuesday,	September,	5,	Examination at the College for admission.
Wednesday,	September	6,	First Term begins; Registration Day.
Thursday,	November	30,	Thanksgiving Day.
Thursday,	December	21,	First Term ends.

1900.

Wednesday,	January	3,	Second Term begins; Registration Day.
Monday,	February	12,	Announcement of Subjects of Theses.
Friday,	March	16,	Second Term ends.
Tuesday,	March	20,	Third Term begins; Registration Day.
Friday,	May	11,	Last Day for submitting Theses.
Friday,	May	18,	Senior Examinations end.
Friday,	May	25,	Examinations end.
Sunday,	May	27,	Baccalaureate Sermon.
Tuesday,	May	29,	Annual Oration.
Wednesday,	May	30,	Commencement Day.

BOARD OF TRUSTEES.

W. S. Primrose, Raleigh,
President of the Board.

First Appointed.	*Member.*	*Representative of*	*Term Expires.*
1887	W. S. Primrose, Raleigh	State-at-Large	1901
1887	A. Leazar, Mooresville	State-at-Large	1901
1887	H. E. Fries, Salem	State-at-Large	1901
1893	D. A. Tompkins, Charlotte	Sixth District	1901
1894	T. B. Twitty, Rutherfordton	State at-Large	1901
1895	Frank Wood, Edenton	First District	1901
1897	J. C. L. Harris, Raleigh	State-at-Large	1903
1897	L. C. Edwards, Oxford	State-at-Large	1903
1897	John W. Harden, Jr., Raleigh	State-at-Large	1901
1897	H. E. Bonitz, Wilmington	State-at-Large	1901
1897	Matt Moore, Kenansville	Third District	1901
1897	J. Z. Waller, Burlington	Fifth District	1901
1899	W. H. Ragan, High Point	State-at-Large	1901
1899	David Clark, Charlotte	State-at-Large	1901
1899	R. L. Smith, Albemarle	State-at-Large	1901
1899	P. J. Sinclair, Marion	State-at-Large	1901
1899	J. B. Stokes, Windsor	Second District	1901
1899	W. J. Peele, Raleigh	Fourth District	1901
1899	E. Y. Webb, Shelby	Seventh District	1901
1899	W. C. Fields, Sparta	Eighth District	1901
1899	J. Frank Ray, Franklin	Ninth District	1901
1899	Alex. Q. Holladay	President of the College.	*Ex officio.*

EXECUTIVE COMMITTEE.

W. S. Primrose, *Chairman.*
A. Leazar, H. E. Fries.

COLLEGE FINANCE COMMITTEE.

W. H. Ragan, *Chairman.*
J. F. Ray, David Clark.

STATION FINANCE COMMITTEE.

W. C. Fields, *Chairman.*
J. B. Stokes, E. Y. Webb.

FACULTY AND OFFICERS.

ALEXANDER Q. HOLLADAY,

(LL. D., Davidson College; University of Virginia; University of Berlin),

President and Professor of History.

W. F. MASSEY,

(C. E., Union College; Washington College; Dickinson College),

Professor of Horticulture, Arboriculture and Botany.

W. A. WITHERS,

(A. M., Davidson College; (Fellow) Cornell University),

Professor of Pure and Agricultural Chemistry.

D. H. HILL, A. M.,

Professor of English.

W. C. RIDDICK,

(A. B., University of North Carolina; C. E., Lehigh University),

Professor of Civil Engineering and Mathematics.

FRANK E. EMERY,

(B. S. and M. S., Maine State College, now University of Maine),

Professor of Agriculture.

F. A. WEIHE,

(M. E., Lehigh University; Ph. D., University of Berlin, Germany),

Professor of Physics and Electrical Engineering.

C. W. SCRIBNER,

(A. B., Princeton; M. E., Stevens),

Professor of Mechanical Engineering and Secretary.

COOPER CURTICE,

(B. S., Cornell University; D. V. S., Columbia Veterinary College; M. D., Columbian University),

Professor of Zoology and Veterinary Science.

E. G. BUTLER,
Assistant Professor of English and Bursar.

R. E. L. YATES,
(A. M., Wake Forest College),
Instructor in Mathematics.

CHARLES M. PRITCHETT,
(B. S., Ga. School of Tech.; M. E., C. E., N. C. College of Agriculture and Mechanic Arts),
Instructor in Mechanical Engineering.

CHARLES B. PARK,
Superintendent of Shops.

B. S. SKINNER,
Farm Superintendent.

J. A. BIZZELL,
(B. S., N. C. College of Agriculture and Mechanic Arts),
Instructor in Chemistry.

THOMAS L. WRIGHT,
(B. S., University of North Carolina),
Instructor in Mathematics.

C. W. HYAMS,
(Trinity College; University of Tennessee),
Instructor in Botany.

J. M. JOHNSON,
(B. S., University West Virginia; M. S., Cornell University),
Instructor in Agriculture.

*G. S. FRAPS,
(B. S., N. C. College of Agriculture and Mechanic Arts; Ph. D., Johns Hopkins University),
Instructor in Chemistry.

*On leave of absence. The duties are performed temporarily by J. M. Pickel, Ph. D.

B. J. WOOTTEN,

(B. S., N. C. College of Agriculture and Mechanic Arts, Lieut. U. S. V.),

Instructor in Military Science and Tactics.

JAQUES BUSBEE,

(Art Students' League, N. Y.; Pupil Wm. M. Chase),

Instructor in Free-hand Drawing.

J. W. CARROLL,

(B. S., N. C. College of Agriculture and Mechanic Arts),

Dairyman.

W. A. G. CLARK,

(B. S., N. C. College of Agriculture and Mechanic Arts),

Assistant in Civil Engineering.

H. W. PRIMROSE,

(B. S., N. C. College of Agriculture and Mechanic Arts),

Assistant in Chemistry.

J. L. WATSON,

(B. S., N. C. College of Agriculture and Mechanic Arts),

Assistant in Shop Work.

N. R. STANSEL,

(B. S., N. C. College of Agriculture and Mechanic Arts),

Assistant in Physics and Electrical Engineering.

E. B. OWEN,

(B. S., N. C. College of Agriculture and Mechanic Arts),

Tutor Sub-Freshman Class.

MRS. SUE C. CARROLL,

Matron.

JAS. R. ROGERS,

A. B., Wake Forest College; M. D., College of Phys. and Surg., Baltimore),

Physician.

AGRICULTURAL EXPERIMENT STATION.

The North Carolina Agricultural Experiment Station was established in accordance with the act of the General Assembly, ratified March 12th, 1877. Its work was materially aided by the act of Congress of March 2d, 1887, popularly known as the "Hatch act," which made a liberal donation to each State for the purpose of investigations in Agriculture, and for publishing the same.

EXPERIMENT STATION STAFF.

*Alex. Q. Holladay, LL. D., President of the College.
*W. A. Withers, A. M., Acting Director and Chemist.
*F. E. Emery, M. S., Agriculturist
*W. F. Massey, C. E., Horticulturist.
*Cooper Curtice, D. V. S., M. D., Veterinarian.†
‡G. S. Fraps, Ph. D., Assistant Chemist.
J. A. Bizzell, B. S., Assistant Chemist.
H. W. Primrose, B. S., Assistant Chemist.
Alex. Rhodes, Assistant Horticulturist.
C. W. Hyams, Assistant Botanist.
J. M. Johnson, M. S., Assistant Agriculturist.
B. S. Skinner, Farm Superintendent.
J. M. Fix, Secretary.
C. M. Hughes, B. E., Clerk.
Mrs. L. V. Darby, Stenographer.

**FERTILIZER CONTROL DIVISION.

A. W. Blair, A. M., State Chemist.
C. B. Williams, M. S., Assistant Chemist.
C. D. Harris, B. S., Assistant Chemist.
F. G. Kelly, Assistant Chemist.
W. G. Haywood, B. Litt., Assistant Chemist.
H. E. King, Chief Clerk.
Miss M. S. Birdsong, Stenographer.

EXPERIMENT STATION PUBLICATIONS.

These publications are prepared for the benefit of the farmers of the State, the truckers, nurserymen, stock raisers, etc., and are sent cheerfully and free of charge to anyone in the State who will read and study them. Make the request on a postal card, addressed *Agricultural Experiment Station, Raleigh, N. C.*

CORRESPONDENCE.

The Station is very glad to receive questions from the farmers of the State in regard to agricultural matters.

*Member of the Station Council.
†On leave of absence after March 15th.
‡On leave of absence until May 15th. The duties are being performed temporarily by J. M. Pickel, Ph. D.
**The Fertilizer Control Division and its work will be transferred to the control of the Board of Agriculture after June 30th, 1899.

COURSES OF STUDY.

The three general courses of study offered in this institution are in Agriculture, in Engineering and in Science.

In the Freshman year, all students have the same subjects of study. These subjects are given by the following table:

FRESHMAN CLASS.

SUBJECTS.	NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
	1st Term.	2d Term.	3d Term.	Page	No.
Arithmetic	4	—	—	31	1
Algebra	2	5	5	31	2
Introductory Rhetoric	3	3	3	31	1
Composition	1	1	1	31	2
American History	1	1	1	33	1
Human Physiology	3	—	—	25	11
Soil Physics	—	4 (part)	—	24	1
Market Gardening	—	4 (part)	—	24	2
Elements of Agriculture	—	—	4	23	1
Elementary Physics	3	3	3	32	1
Free-hand Drawing	3	—	—	26	1*a*
Elementary Mechanical Drawing	—	3	3	26	1*c*
Carpenter Shop	4	4	4	27	2*a*

At the beginning of the Sophomore year, the courses begin to specialize, and the student selects the course best fitted to his needs. With each of the higher classes, more time is given to the technical studies of the course. A thesis is required for graduation.

THE COURSE IN AGRICULTURE.

The technical work of this course is in Agriculture, Horticulture and Chemistry.

Inasmuch as this is not a manual labor training school, no attempt is made to educate a young man to be *simply* a farm laborer, but he receives, in addition to his practical work, a higher training that will fit him for a life of more extended usefulness.

SOPHOMORE CLASS.

SUBJECTS.	NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
	1st Term.	2d Term.	3d Term.	Page	No.
Breeds of Live Stock	—	4	—	23	3
Staple Crops	—	—	3	23	4
Agricultural Practice	—	2	4	23	2*a*
Structural Botany	2	2	—	24	1
Pomology	3	2	—	24	3
Physiological Botany	—	—	2	24	2
Entomology	—	2	—	25	10
Entomology (field and laboratory work)	—	—	4	25	10
Inorganic Chemistry	3	3	3	25	1
Experimental Chemistry	4	4	4	25	2
Geometry	5	5	—	32	4
Trigonometry	—	—	4	32	5
Architecture	3	—	—	30	1
Architectural Drawing	5	—	—	30	2
American Literature	1	1	1	31	3
Rhetoric	2	2	2	31	4
Ancient and Mediæval History	1	1	1	33	2
Book-keeping	—	1	1	33	1

JUNIOR CLASS.

Sheep and Swine Husbandry	3	—	—	23	6
Dairying	—	3	—	23	7
Dairy Bacteriology	—	—	3	23	8
Agricultural Practice	4	8	—	23	2*b*
Meteorology	3	—	—	23	5
Landscape Gardening	4 (part)	—	—	24	4
Forestry	4 (part)	—	—	24	5
Systematic Botany	4	—	—	24	3
Palæobotany	—	2	—	25	4
Green-house Propagation	—	2	—	24	6
Cryptogamic Botany	—	—	4 (part)	25	5
Vegetable Histology	—	—	4 (part)	25	6
Agricultural Chemistry	3	3	3	26	6
Qualitative Analysis	6	6	6	25	3
Surveying	—	2	2	29	2
Surveying (field work)	—	—	9	29	3
Logic	3	—	—	31	5
Studies in Prose	—	3	—	31	6
Poetic Study	—	—	3	31	7
English History	1	1	1	33	3

SENIOR CLASS.

SUBJECTS.	NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
	1st Term.	2d Term.	3d Term.	Page	No.
Cattle Feeding	5	—	—	23	9
Stock Breeding	—	5	—	23	10
Soil Physics	—	—	5 (part)	23	11
Agricultural Economics	—	—	5 (part)	23	12
Agricultural Practice	4	4	4	23	2*c*
Horticulture	2	—	—	24	7
Floriculture	—	2	—	24	8
Plant Breeding	—	—	2	24	9
Horticultural Practice	4	4	4	24	10
Organic Chemistry	3	3	3	26	7
Introductory Quantitative Analysis	7	—	—	26	4
Advanced Quantitative Analysis	—	8	8	26	5
History of English Literature	3	3	3	31	8
Ecclesiastical and Modern History	1	1	1	33	4
Military Tactics	1	1	1	34	1
Thesis.					

THE COURSE IN ENGINEERING.

The course in Engineering is designed to prepare the student to make the most of his subsequent experience, so that he may be soonest fitted to meet the demands of modern practice as an engineer, as a draughtsman, as a practical mechanic, or as an electrician

The technical work is in Mechanical, Civil and Electrical Engineering, and toward the end of the course, the student is allowed to specialize somewhat along one of these lines.

SOPHOMORE CLASS.

SUBJECTS.	NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
	1st Term.	2d Term.	3d Term.	Page	No.
Turning and Pattern Shop	6	6	6	27	2*b*
Mechanical Drawing	—	2	5	27	1*d*
Architecture	3	—	—	30	1
Architectural Drawing	5	5	—	30	2
Inorganic Chemistry	3	3	3	25	1
Experimental Chemistry	4	4	4	25	2
Geometry	5	5	—	32	4
Algebra	—	—	2	32	3
Trigonometry	—	—	4	32	5
American Literature	1	1	1	31	3
Rhetoric	2	2	2	31	4
Ancient and Mediæval History	1	1	1	33	2
Book-keeping	—	1	1	33	1

JUNIOR CLASS.

SUBJECTS.	NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
	1st Term.	2d Term.	3d Term.	Page	No.
Steam Engine	3	2	—	27	4
Valve Gears	3	—	—	27	5
Drawing and Designing	5	5	5	27	1*e*
Forge Shop	5	5	5	27	3*a*
Mechanics	3	—	—	32	8
Graphical Statics	—	3	—	29	1
Surveying	—	2	2	29	2
Surveying (field work)	—	—	9	29	3
Electricity and Magnetism	—	3	3	32	2
Physical Laboratory	4	3	—	33	4
Trigonometry	3 (part)	—	—	32	5
Analytical Geometry	3 (part)	3	3	32	6
Logic	3	—	—	31	5
Studies in Prose	—	3	—	31	6
Poetic Study	—	—	3	31	7
English History	1	1	1	33	3

SENIOR CLASS—MECHANICAL ENGINEERING GROUP.

Machine Shop	7	7	7	27	3*b*
Machine Design	4	3	4	29	12
Mechanical Laboratory	—	4	5	29	13
Steam Boilers	1	—	—	27	6
Boiler Design	—	3	2	28	7
Mechanics of Machinery	—	—	2	28	9
Hydraulics	—	2	2	30	7
Analytical Mechanics	3	3	—	28	10
Strength of Materials	—	—	3	28	11
Electricity and Magnetism	3	—	—	32	2
Physical Laboratory	4	—	—	33	5
Calculus	4	4	—	32	7
History of English Literature	3	3	3	31	8
Ecclesiastical and Modern History	1	1	1	33	4
Military Tactics	1	1	1	34	1
Thesis					

SENIOR CLASS—CIVIL ENGINEERING GROUP.

SUBJECTS.	NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
	1st Term.	2d Term.	3d Term.	Page	No.
Railroad Engineering	—	2	2	29	4
Railroad Engineering (field work)	—	—	7	30	5
Roofs, Bridges and Arches	4	3	4	30	6
Hydraulics	—	2	2	30	7
Machine Shop	7	7	—	27	3*b*
Mechanical Laboratory	—	4	5	29	13
Mechanics of Machinery	—	—	2	28	9
Steam Boilers	1	—	—	27	6
Analytical Mechanics	2	3	—	28	10
Strength of Materials	—	—	3	28	11
Electricity and Magnetism	3	—	—	32	2
Physical Laboratory	4	—	—	33	5
Calculus	4	4	—	32	7
History of English Literature	3	3	3	31	8
Ecclesiastical and Modern History	1	1	1	33	4
Military Tactics	1	1	1	34	1
Thesis.					

SENIOR CLASS—ELECTRICAL ENGINEERING GROUP.

Electricity and Magnetism	3	—	—	32	2
Electrical Laboratory	—	5	5	30	2
Electrical Engineering	—	4	4	30	1
Machine Design	4	3	4	29	12
Machine Shop	7	5	5	27	3*b*
Steam Boilers	1	—	—	27	6
Mechanics of Machinery	—	—	2	28	9
Hydraulics	—	2	2	30	7
Analytical Mechanics	3	3	—	28	10
Strength of Materials	—	—	3	28	11
Physical Laboratory	4	—	—	33	5
Calculus	4	4	—	32	7
History of English Literature	3	3	3	31	8
Ecclesiastical and Modern History	1	1	1	33	4
Military Tactics	1	1	1	34	1
Thesis.					

THE COURSE IN SCIENCE.

This course affords the student an opportunity to devote his time to special work in Zoology, Botany, Agricultural and Analytical Chemistry, Physics, applied Electricity, applied Mathematics, etc., in addition to the general studies. During the Senior year the work is very largely elective and the subjects are arranged in groups so as to suit the needs of the student.

SOPHOMORE CLASS.

SUBJECTS.	NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
	1st Term.	2d Term.	3d Term.	Page.	No.
Structural Botany	2	2	—	24	1
Physiological Botany	—	—	2	24	2
Pomology	3	2	—	24	3
Entomology	—	2	—	25	10
Entomology (field and laboratory work)	—	—	4	25	10
Inorganic Chemistry	3	3	3	25	1
Experimental Chemistry	4	4	4	25	2
Architecture	3	—	—	30	1
Architectural Drawing	5	—	—	30	2
Free-hand Drawing	—	5	5	26	1b
Geometry	5	5	—	32	4
Algebra	—	—	2	32	3
Trigonometry	—	—	4	32	5
American Literature	1	1	1	31	3
Rhetoric	2	2	2	31	4
Ancient and Mediæval History	1	1	1	33	2
Book-keeping	—	1	1	33	1

JUNIOR CLASS.

SUBJECTS.		NUMBER OF HOURS PER WEEK.			FOR BRIEF DESCRIPTION SEE	
		1st Term.	2d Term.	3d Term.	Page.	No.
Systematic Botany		4	—	—	24	3
Palæobotany		—	2	—	25	4
Cryptogamic Botany		—	—	4 (part)	25	5
Vegetable Histology		—	—	4 (part)	25	6
Forestry		4 (part)	—	—	24	5
Landscape Gardening		4 (part)	—	—	24	4
Green-house Propagation		—	2	—	24	6
Organic Chemistry		3	3	3	26	7
Qualitative Analysis		6	6	6	25	3
Mechanics		3	—	—	32	8
Electricity and Magnetism		—	3	3	32	2
Physical Laboratory		—	4	4	33	4
Trigonometry		3 (part)	—	—	32	5
Analytical Geometry		3 (part)	3	3	32	6
Logic		3	—	—	31	5
Studies in Prose		—	3	—	31	6
Poetic Study		—	—	3	31	7
English History		1	1	1	33	3

SENIOR CLASS—CHEMICAL GROUP.

Agricultural Chemistry	required subjects.	3	3	3	26	6
Theoretical Chemistry		2	2	2	26	9
Introductory Quantitative Analysis		7	—	—	26	4
Advanced Quantitative Analysis		—	12	12	26	5
Electricity and Magnetism		3	—	—	32	2
Light and Heat		—	3	3	32	3
Physical Laboratory	A	6	—	—	33	5
History of English Literature		3	3	3	31	8
Ecclesiastical and Modern History		1	1	1	33	4
Military Tactics		1	1	1	34	1
Biology	B	6	6	6	25	7
Advanced Quantitative Analysis	C	6	6	6	26	5
Physical Laboratory	D	—	6	6	33	5*b*
Thesis.						

NOTE.—In addition to the required subjects, A, one of the groups B or C must be taken, during the first term, and B, C or D during the second and third terms.

SENIOR CLASS—PHYSICAL GROUP.

SUBJECTS.		NUMBER OF HOURS PER WEEK. 1st Term.	2d Term.	3d Term.	FOR BRIEF DESCRIPTION SEE Page.	No.
Electricity and Magnetism,		3	—	—	32	2
Light and Heat		—	3	3	32	3
Analytical Mechanics		3	3	—	28	10
Strength of Materials		—	—	3	28	11
Physical Laboratory		6	6	6	33	5
Introductory Quantitative Analysis	required subjects.	7	—	—	26	4
Advanced Quantitative Analysis		—	8	8	26	5
History of English Literature	E	3	3	3	31	8
Ecclesiastical and Modern History		1	1	1	33	4
Military Tactics		1	1	1	34	1
Calculus	F	4	4	2	32	7
Theoretical Chemistry		2	2	2	26	9
Advanced Quantitative Analysis	G	4	4	4	26	5
Thesis.						

NOTE.—In addition to the required subjects, E, one of the two groups, F or G, must be taken.

SENIOR CLASS—BIOLOGICAL GROUP.

Biology		6	6	6	25	7
Horticulture		2	—	—	24	7
Floriculture		—	2	—	24	8
Plant Breeding	required	—	—	2	24	9
Horticultural Practice	subjects	4	4	4	24	10
Agricultural Chemistry		3	3	3	26	6
History of English Literature	H	3	3	3	31	8
Ecclesiastical and Modern History		1	1	1	33	4
Military Tactics		1	1	1	34	1
Cattle Feeding		5	—	—	23	9
Stock Breeding		—	5	—	23	10
Soil Physics	I	—	—	5 (part)	23	11
Agricultural Economics		—	—	5 (part)	23	12
Agricultural Practice		4	4	4	23	2c
Theoretical Chemistry		2	2	2	26	9
Introductory Quantitative Analysis	J	7	—	—	26	4
Advanced Quantitative Analysis		—	8	8	26	5
Thesis.						

NOTE.—In addition to the required subjects, H, one of the groups I or J must be taken.

HORTICULTURAL DEPARTMENT.

POST-GRADUATE COURSES.

Post-graduate courses have been established, leading to the degrees of Master of Science (M. S.), Mechanical Engineer (M. E.), Civil Engineer (C. E.), and Electrical Engineer (E. E.).

The Faculty will recommend for advanced degrees candidates who, having taken the Bachelor's Degree in Agriculture, Science or Engineering, shall pursue for at least two years a course of study and shall pass the required examinations.

Candidates for the Master's degree may take their major subject in Agriculture, Horticulture, Chemistry, Physics, or Biology. Candidates for the degrees of M. E., C. E. and E. E., may choose special lines of work in one of the Engineering departments.

The professor in charge will prescribe a course made up largely of general studies and practice in the work of his department, but including also special subjects in the lines chosen by the student.

A thesis embodying some special design, or the results of some original investigation, must be submitted and accepted before the final examinations are taken.

The studies will be carefully adapted to the expansion and development of the special lines of work selected by graduate students for a professional calling.

IRREGULAR WORK.

All students are advised to take one of the regular courses of study, but students who are otherwise qualified may be allowed to elect certain studies from the regular courses already provided in the College, if no inconvenience result therefrom to the members of the regular class.

SHORT COURSES.

Any applicant for such a course must satisfy the Faculty that he is fitted to undertake the work and that he has some definite purpose which he seeks to attain. He should be at least eighteen years of age. The particular studies to be taken up and the time to be devoted to each will be determined for each applicant at the time he is received, which should, whenever possible, be at the beginning of one of the regular college terms.

In the short course in Agriculture the student may devote his attention to the study of Breeds of Live Stock, Cattle Feeding, Dairying, Agricultural Chemistry, Stock Breeding, Staple Crops, Pomology, Market Gardening and Green-house Propagation.

In the short course in Mechanic Arts the student may devote his attention to the study of Drawing, Shop Work, Boiler-, Engine- and Dynamo-tending, Building Materials and Book-keeping.

If desired, the student may in addition devote some time to English and Mathematics, or other general studies.

SUB-FRESHMAN CLASS.

A Sub-Freshman Class has been organized to give special preparation to such young men as are unable to enter the Freshman Class, and who nevertheless desire a technical education. No county will be allowed to have more representatives in this class than it has in the House of Representatives of the General Assembly.

SUBJECTS OF INSTRUCTION.

AGRICULTURE AND LIVE STOCK.

1. ELEMENTS OF AGRICULTURE.—Recitations. Four hours, third term. Required of all Freshmen. Prof. Emery and Mr. Johnson.

2*a*. AGRICULTURAL PRACTICE.—Work in the field, stable, dairy, and with farm machinery. Two hours, second term, and four hours, third term. Required of Sophomores in Agriculture. Mr. Johnson.

2*b*. AGRICULTURAL PRACTICE.—Continuation of 2*a*. Four hours, first term, and eight hours, second term. Required of Juniors in Agriculture. Mr. Johnson.

2*c*. AGRICULTURAL PRACTICE.—Continuation of 2*b*. Four hours. Required of Seniors in Agriculture and in Science-I. Prof. Emery.

3. BREEDS OF LIVE STOCK.—Four hours, second term. Required of Sophomores in Agriculture. Mr. Johnson.

4. STAPLE CROPS.—Lectures. Three hours, third term. Required of Sophomores in Agriculture. Mr. Johnson.

5. METEOROLOGY.—Recitations. Three hours, first term. Required of Juniors in Agriculture. Prof. Emery.

6. SHEEP AND SWINE HUSBANDRY.—Lectures. Three hours, first term. Required of Juniors in Agriculture. Mr. Johnson.

7. DAIRYING.—Lectures. Three hours, second term. Required of Juniors in Agriculture. Mr. Johnson.

8. DAIRY BACTERIOLOGY.—Russell's *Dairy Bacteriology*. Three hours, third term. Required of Juniors in Agriculture. Mr. Johnson.

9. CATTLE FEEDING.—Stoichiology. Five hours, first term. Required of Seniors in Agriculture and in Science-I. Prof Emery.

10. STOCK BREEDING.—Text-book and Notes. Five hours, second term. Required of Seniors in Agriculture and in Science-I. Prof. Emery.

11. SOIL PHYSICS.—Recitations and Lectures. Five hours, third term (part). Required of Seniors in Agriculture and in Science-I. Prof. Emery.

12. AGRICULTURAL ECONOMICS.—Lectures. Fertility of soils, farm machinery, farm management. Five hours, third term (part). Required of Seniors in Agriculture and in Science-I. Prof. Emery.

HORTICULTURE.

1. SOIL PHYSICS.—Four hours, second term (part). Required of all Freshmen. Mr. Hyams.
2. MARKET GARDENING.—Massey's *Trucking in the South.* Four hours, second term (part). Required of all Freshmen. Mr. Hyams.
3. POMOLOGY.—Practice. Application of principles to pomology with practice in budding, pruning and grafting. Three hours, first term; two hours, second term. Required of Sophomores in Agriculture and Science. Mr. Rhodes.
4. LANDSCAPE GARDENING.—Lectures. Laying out of grounds, and history of garden art. Four hours, first term (part). Required of Juniors in Agriculture and Science. Prof. Massey.
5. FORESTRY.—Lectures on forests, timbers and forest products. Four hours, first term (part). Required of Juniors in Agriculture and Science. Prof. Massey.
6. GREEN-HOUSE PROPAGATION.—Practice in green-house. Two hours, second term. Required of Juniors in Agriculture and Science. Mr. Rhodes.
7. HORTICULTURE.—Lectures. The principles and practice of market gardening, the culture of small fruits and vegetables out of doors and under glass, green-house management, structure of green-houses and heating apparatus. Two hours, first term. Required of Seniors in Agriculture, and in Science-H. Prof. Massey.
8. FLORICULTURE.—Lectures. Commercial culture of flowers in open ground and under glass. Two hours, second term. Required of Seniors in Agriculture and Science-H. Prof. Massey.
9. PLANT BREEDING.—Recitations. Two hours, third term. Required of Seniors in Agriculture and in Science-H. Prof. Massey.
10. HORTICULTURAL PRACTICE.—Practice in field, green-house and grounds, to supplement Nos. 4, 7 and 8. Four hours. Required of Seniors in Agriculture and in Science-H. Mr. Rhodes.

BIOLOGY.

1. STRUCTURAL BOTANY.—Bailey's *Lessons with Plants.* Two hours, first and second terms. Required of Sophomores in Agriculture and Science. Mr. Hyams.
2. PHYSIOLOGICAL BOTANY.—Lectures. Two hours, third term. Required of Sophomores in Agriculture and Science. Prof. Massey.
3. SYSTEMATIC BOTANY.—Practice. Collection of native plants and formation of herbarium. Four hours, first term. Required of Juniors in Agriculture and Science. Mr. Hyams.

4. PALÆOBOTANY.—Dawson's *Geological History of Plants.* A general outline of geology, directed especially to the tracing of the development of plant-life with geological periods. Two hours, second term. Required of Juniors in Agriculture and Science. Professor Massey.
5. CRYPTOGAMIC BOTANY.—Laboratory practice. Four hours, third term (part). Required of Juniors in Agriculture and Science. Professor Massey and Mr. Hyams.
6. VEGETABLE HISTOLOGY.—Spalding's *Introductory* and Hillhouse's *Translation of Strasburger.* Laboratory work with microscope. Four hours, third term (part). Required of Juniors in Agriculture and Science. Professor Massey and Mr. Hyams.
7. BIOLOGY.—*Dodge.* Six hours. Required of Seniors in Science-H. Professor Massey.
8. ELEMENTS OF BACTERIOLOGY.—*Abbott.* Elective for Seniors in Science, and Post-Graduates. Professor Massey.
9. BACTERIOLOGICAL LABORATORY.—Practice. Elective for Seniors in Science, and Post-Graduates. Professor Massey.
10. ENTOMOLOGY.—Comstock's *Elements.* Two hours, second term, four hours, third term. Required of Sophomores in Agriculture and Science. Professor Massey.
11. HUMAN PHYSIOLOGY.—Hutchinson's *Physiology*, supplemented by charts and illustrations. Three hours, first term. Required of all Freshmen. Professor Emery and Mr. Johnson.

CHEMISTRY.

1. INORGANIC CHEMISTRY.—The common elements and their principal compounds are studied, together with some of the fundamental principles of the science. Due attention is given to Stoichiometry. The lectures and recitations are illustrated with experiments and the exhibition of specimens, to which reference is made. Remsen's *Introduction to the Study of Chemistry.* Three hours. Required of all Sophomores. Professor Withers and Mr. Bizzell.
2. EXPERIMENTAL CHEMISTRY.—The student repeats for himself, under the eye of the instructor, the experiments performed in the lecture-room. He records in a note-book his results and his explanations of the same. Remsen and Randall's *Laboratory Guide.* Four hours. Required of all Sophomores. Mr. Primrose.
3. QUALITATIVE ANALYSIS.—The student is taught the identification of the more common elements in unknown compounds. He is required to write the reactions involved. Caldwell's *Chemical Analysis.* Six hours. Required of Juniors in Agriculture and Science. Mr. Bizzell.

4. INTRODUCTORY QUANTITATIVE ANALYSIS.—*Caldwell.* The student is taught the use of the balance and familiarized with a few of the more common volumetric and gravimetric determinations. Seven hours, first term. Required of Seniors in Agriculture and Science-A and -E. Elective for Seniors in Science-J. Mr. Bizzell.
5. ADVANCED QUANTITATIVE ANALYSIS.—A continuation of 4. The student may devote his time to Agricultural, Technical or Physical Chemistry, depending upon his wishes. Eight hours, second and third terms. Required of Seniors in Agriculture and in Science-E. Elective for Seniors in Science-J. Twelve hours, second and third terms. Required of Seniors in Science-A. Four hours. Elective for Seniors in Science-G. Six hours. Elective for Seniors in Science-C. Professor Withers and Mr. Bizzell.
6. AGRICULTURAL CHEMISTRY.—The lectures follow Mayer. Attention is given to a consideration of the atmosphere as a plant feeder; the mineral and organic constituents of the plant, and their functions; the preparation of manures and composts; green manuring; the composition of fodder, and the different means of curing and preserving it; chemistry of butter, of milk, etc. Three hours. Required of Juniors in Agriculture, and of Seniors in Science-A and -H. Professor Withers.
7. ORGANIC CHEMISTRY.—*Remsen.* Three hours. Required of Juniors in Science and of Seniors in Agriculture. Mr. Bizzell.
8. ORGANIC SYNTHESIS.—Orndoff's *Manual.* Seven hours. Elective for Seniors in Science and Post-Graduates. Dr. Fraps.
9. THEORETICAL CHEMISTRY.—*Meyer.* Two hours. Required of Seniors in Science-A. Elective for Seniors in Science-G and -J. Dr. Fraps.
10. HISTORICAL CHEMISTRY.—*Von Meyer.* One hour. Elective for Seniors in Science and Post-Graduates. Dr. Fraps.

MECHANICAL ENGINEERING.

1*a*. FREE-HAND DRAWING.—An elementary drill in the use of the pencil, beginning with simple forms. Sketches of objects, usually some piece of a machine. Three hours, first term. Required of all Freshmen. Mr. Pritchett.

1*b*. FREE-HAND DRAWING.—Elementary cast drawing and sketching from life. Five hours, second and third terms. Required of Sophomores in Science. Mr. Busbee.

1*c*. ELEMENTARY MECHANICAL DRAWING.—Use of instruments. Drawing practice on elementary machine pieces. Elementary projections. Drawings made to scale, from working sketches of pieces of machines. Three hours, second and third terms. Required of all Freshmen. Mr. Pritchett.

CHEMICAL LABORATORY.

1*d*. MECHANICAL DRAWING.—Isometric sketches from Mechanical drawings. Elements of machine designs. Working sketches and drawings of simple machine parts from the model. Shadow lines. Two hours, second term; five hours, third term. Required of Sophomores in Engineering. Mr. Pritchett and Mr. Watson.

1*e*. DRAWING AND DESIGNING.—Making working sketches, finished drawings, tracings and blue prints, from the tools and machines in the laboratories. Designing parts of tools or some piece of mechanism. Five hours. Required of Juniors in Engineering. Mr. Pritchett.

2*a*. CARPENTER SHOP.—Bench work in wood. Exercises made from working drawings, involving use of various tools, fitting of joints, etc. Making and finishing simple articles. Four hours. Required of all Freshmen. Mr. Watson..

2*b*. TURNING AND PATTERN SHOP.—Use of wood-working machinery, exercises from working drawings made on lathes and other tools, principles of pattern-making. Six hours. Required of Sophomores in Engineering. Mr. Park.

3*a*. FORGE SHOP.—Smith-work in iron and steel. Exercises from drawings, involving forging, welding, tempering, etc. Five hours. Required of Juniors in Engineering. Mr. Park.

3*b*. MACHINE SHOP.—Machine work in iron, steel, brass, etc. Exercises made from drawings on various machine tools. Construction of parts of a steam-engine, dynamo or some other machine, or of laboratory apparatus, involving machine tool work. Seven hours. Required of Seniors in Mechanical Engineering. Required of Seniors in Civil Engineering, first and second terms, and of Seniors in Electrical Engineering, first term. Five hours. Required of Seniors in Electrical Engineering, second and third terms. Mr. Park.

4. STEAM-ENGINE.—Descriptive study of Engines and Boilers, covering the details of cylinders, pistons, valves, connecting-rods, bed plates, foundations, and the ordinary types of boilers with their settings. Holmes' *The Steam Engine*, supplemented by sketching from cuts, drawings, and such engines and boilers as are accessible. Three hours, first term; two hours, second term. Required of Juniors in Engineering. Professor Scribner.

5. VALVE GEARS.—General theory of the slide-valve and link motions, and its application in the study and design of the valve mechanism of steam-engines; problems and exercises. McCord's *The Slide Valve*. Three hours, first term. Required of Juniors in Engineering. Mr. Clark.

6. STEAM BOILERS.—Types of Boilers, materials used, construction, staying, settings, furnaces and chimneys, fittings and appliances, boiler power, use and care of boilers, fuels and combustion, corro-

sion and incrustation. Peabody & Miller's *Steam Boilers.* One hour, first term. Required of Seniors in Engineering. Professor Scribner.

7. BOILER DESIGN.—Determination of proper proportions for grate and heating surfaces, area and length of flues and tubes, diameter and thickness of shell, arrangement and proportions of stays, etc., for various forms of boilers. Making sketches and working drawings from original designs (Wilson, Peabody & Miller, Barr, etc.). Each student is required to design every part of a boiler after one of the well-known types, stationary, marine or locomotive (no two having the same), and to make complete working drawings and tracings. Three hours, second term; two hours, third term. Required of Seniors in Mechanical Engineering. Professor Scribner.
8. STEAM-ENGINE DESIGN.—Determination of the proper proportions for cylinders, valves, pistons, rods, shafts, fly-wheels, etc. Making rough sketches and working drawings from original designs. Unwin's *Machine Design*, Part II. Each student is required to design the principal parts of an engine after one of the well-known types, calculating the parts when the question of strength enters, and following the general design of the chosen type when the proportions are matters of experience. Two hours, for Post-Graduates. Professor Scribner.
9. MECHANICS OF MACHINERY.—Application of the laws of forces to machines, determination of motive or driving forces, including considerations of acceleration, inertia, friction, wear and efficiency by use of analytical and graphical methods; solution of problems, lecture notes and reference books. Two hours, third term. Required of Seniors and Post-Graduates in Engineering. Professor Scribner.
10. ANALYTICAL MECHANICS.—Nature and measure of forces, moments, conditions of equilibrium, moment of inertia, laws of motion, constraining and accelerating forces, dynamics of a rigid body, momentum and impact, work, power, friction, application of principles to various engineering problems. Bowser's *Analytical Mechanics.* Three hours, first and second terms. Required of Seniors in Engineering. Professor Scribner.
11. STRENGTH OF MATERIALS.—Study of materials, law of stress and strain, bending and resisting moments, shear and moment diagrams, shear and elastic curves of cantilever, simple, restrained and continuous beams, column formulas, torsion, maximum internal stresses, common flexure theory tested by experiment, problems in beams, analysis and design, specifications. Merriman's *Mechanics of Materials.* Three hours, third term. Required of Seniors in Engineering. Professor Scribner.

12. MACHINE DESIGN.—Complete design and drawing of some piece of mechanism, involving cam motion, gearing, etc., design of some piece of machinery, such as a punch, shears, riveting machine, crane, pump, hoist, water-motor, etc., studies and sketches of existing machines, determination of dimensions according to practice. *Unwin*, *Reuleaux*, *Kent*, *Haswell*, *Klein*, *Weisbach*, *Richards*, etc. Four hours, first term; three hours, second term; four hours, third term. Required of Seniors and Post-Graduates in Mechanical and Electrical Engineering. Professor Scribner and Mr. Pritchett.
13. MECHANICAL LABORATORY.—Determination of leverages and velocity ratios, manipulation of laboratory apparatus, testing gauges, indicator springs, dynamometers, weirs, boilers, engines, pumps, investigation of efficiencies of hoists, screws, etc., tests of materials for strength, co-efficient of friction. Four hours, second term; five hours, third term. Required of Seniors and Post-Graduates in Mechanical Engineering. Professor Scribner and Mr. Watson.
14. THERMODYNAMICS.—Mechanical theory of heat. Application to steam, air and gas-engines, and refrigerating machinery. Two hours, for Post-Graduates. Professor Scribner.
15. HYDRODYNAMICS.—The design of reaction and impulse turbines, measurement of flowing water, description and discussion of experiments. Hydraulic pressure engines. Bodmer's *Hydraulic Motors*. Two hours, for Post-Graduates. Professor Scribner.

CIVIL ENGINEERING.

1. GRAPHICAL STATICS.—Determination of stresses in frame structures by the graphic method. Three hours, second term. Lectures and original problems. Required of Juniors in Engineering. Professor Riddick.
2. SURVEYING.—Land surveying, leveling, elements of triangulation, topographical surveying, railroad surveying, road-making. Two hours, second and third terms. Wentworth's *Surveying*. Lectures. Required of Juniors in Engineering and Agriculture. Professor Riddick.
3. SURVEYING, FIELD WORK.—Use of instruments, compass, transit, level and plane table. Practical work in land surveying, topography, leveling, railroad surveying, working up notes and platting. Nine hours, third term. Required of Juniors in Engineering and Agriculture.
4. RAILROAD AND MUNICIPAL ENGINEERING. Two hours, second and third terms. Searles' *Field Engineering*. Lectures. Required of Seniors in Civil Engineering. Professor Riddick.

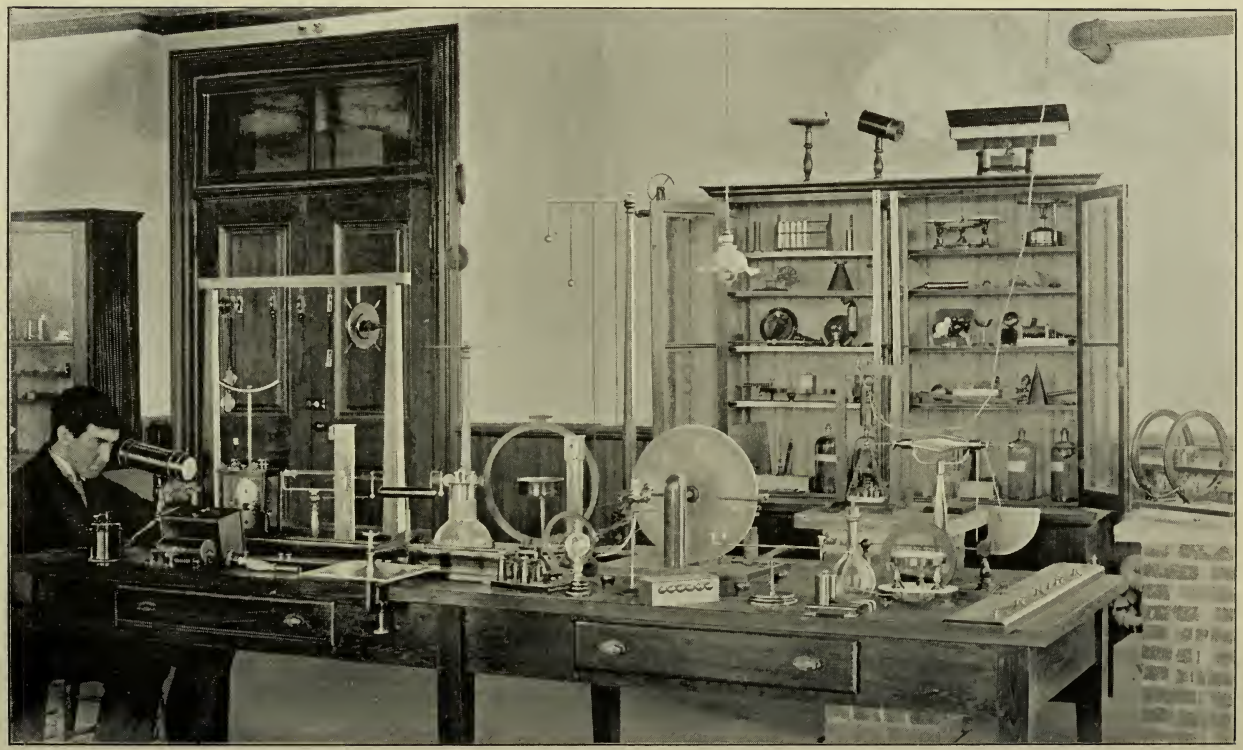
5. RAILROAD AND MUNICIPAL ENGINEERING.—Field Work. Seven hours practice, third term. Required of Seniors in Civil Engineering. Professor Riddick and Mr. Clark.
6. ROOFS, BRIDGES AND ARCHES.—Determination of stresses in roof and bridge trusses by the analytical method, design and construction of arches, roofs and bridges. Merriman's *Roofs and Bridges*. Original problems. Four hours, first term; three hours, second term, and four hours, third term. Required of Seniors in Civil Engineering. Professor Riddick.
7. HYDRAULICS.—Methods of measuring flow of streams, laws governing flow in pipes and conduits, determination of water-power in streams, testing of hydraulic motors. Two hours, second and third terms. Text-book, Merriman's *Hydraulics*. Required of Seniors in Engineering. Professor Riddick.

ELECTRICAL ENGINEERING.

1. ELECTRICAL ENGINEERING.—Practical units. Measurement of current, resistance and electro-motive force. Electro-magnets. Dynamo-electric machines. Dynamos, motors, transformers. Secondary batteries. Lamps. Installation. Four hours, second and third terms. Required of Seniors in Electrical Engineering. Professor Weihe.
2. ELECTRICAL LABORATORY.—Measurements of resistance, currents, electro-motive force, induction and capacity. Five hours, second and third terms. Required of Seniors in Electrical Engineering. Professor Weihe and Mr. Stansel.

ARCHITECTURE.

1. ARCHITECTURE.—Building materials, method of constructing buildings, plans, specifications, bill of materials, estimate of cost, design of buildings. Lectures. Three hours, first term. Required of Sophomores in all courses. Professor Riddick.
2. ARCHITECTURAL DRAWING.—Drawings from a building already constructed, design of a dwelling, detail and perspective drawings. Five hours, first term. Required of all Sophomores. Five hours, second term. Required of Sophomores in Engineering. Mr. Clark.



PHYSICAL LABORATORY.

ENGLISH.

1. INTRODUCTORY RHETORIC.—Hill's *Foundations*. Drill on the forms of language, and the formation of correct and forcible sentences, study of plans in narration and description. Three hours. Required of all Freshmen. Assistant Professor Butler.
2. COMPOSITION.—Written exercises required weekly. Themes are drawn largely from standard works read in class. Students are taught to plan all work, and every effort is made to develop their constructive and imaginative faculties. One hour. Required of all Freshmen. Professor Hill.
3. AMERICAN LITERATURE.—By means of text-books and by parallel reading, students are introduced to what is best in American literature. They study books at first hand. One hour. Required of all Sophomores. Professor Hill.
4. RHETORIC.—Genung's *Practical Rhetoric*. Painstaking paragraphic study; study of themes in exposition and argumentation. Many exercises in planning organic parts of essay and oration. Two hours. Required of all Sophomores. Professor Hill.
5. LOGIC.—Jevon's *Elements* and Gregory's *Practical Logic*. Much attention paid to practical exercises. Three hours, first term. Required of all Juniors. Professor Hill.
6. STUDIES IN PROSE.—Hart's *LeQuincey*, Carlyle's *Burns*, Thurber's *Addison's*, Garnett's *English Prose*. In a general way Minto's plan of prose study is followed. Three hours, second term. Required of all Juniors. Professor Hill.
7. POETIC STUDY.—Versification, lectures on dramatic art. Dowden's *Primer of Shakspeare*, Thayer's *English Plays*, Moulton's *Shakspeare as a Dramatic Artist*, Tennyson's *Princess*, Genung's *In Memoriam*. Three hours, third term. Required of all Juniors. Professor Hill.
8. HISTORY OF ENGLISH LITERATURE.—The development of our literature is studied in its great periods, and through its representative men. Much parallel reading is required. Three hours. Required of all Seniors. Professor Hill.

MATHEMATICS.

1. ARITHMETIC.—Begin with decimal fractions and complete the subject. Four hours, first term. Milne's *Standard Arithmetic*. Required of all Freshmen. Mr. Yates and Mr. Wright.
2. ALGEBRA.—To general theory of equations. Two hours, first term; five hours, second and third terms. Wells' *Higher Algebra*. Required of all Freshmen. Mr. Yates and Mr. Wright.

3. ADVANCED ALGEBRA.—Theory of equations, solution of higher equations, etc. Two hours, third term Wells' *Higher Algebra.* Required of Sophomores in Engineering and Science. Mr. Yates and Mr. Wright.
4. GEOMETRY.—Plane and solid. Five hours, first and second terms. Wentworth's *Plane and Solid Geometry.* Required of all Sophomores. Mr. Yates and Mr. Wright.
5. TRIGONOMETRY.—Plane and spherical. Wentworth's *Plane and Spherical Trigonometry.* Four hours, third term. Required of all Sophomores. Three hours, first term (part). Required of Juniors in Engineering and Science. Mr. Yates.
6. ANALYTICAL GEOMETRY.—Conic sections, higher plane curves, geometry of three dimensions, surfaces of revolution. Three hours, first term (part), second and third terms. Nichols' *Analytical Geometry.* Required of Juniors in Engineering and Science. Mr. Yates
7. CALCULUS.—Differential and integral. Four hours, first and second terms. Taylor's *Elements of Calculus.* Required of Seniors in Engineering and in Science-F. Two hours, third term. Required of Seniors in Science F. Professor Riddick.
8. MECHANICS.—Kinematics, kinetics, work, friction, energy, momentum, composition and resolution of forces, moments. Three hours, first term. Wood's *Elemetary Mechanics.* Required of Juniors in Engineering and Science. Professor Riddick.

PHYSICS.

1. ELEMENTARY PHYSICS.—Introduction. Fundamental units of measurements. Velocity and acceleration. Molar dynamics. Force and momentum. Newton's *Laws of Motion.* Work and energy. Gravitation. Properties of matter. Dynamics of fluids. Sound. Heat and Light. Three hours. Required of all Freshmen. Mr. Stansel.
2. ELECTRICITY AND MAGNETISM.—Frictional electricity, magnetism, current electricity, electro-statics, electro-magnets, thermo-electricity, heat, power and light from electric currents, induction, electro-chemistry. Three hours, second and third terms. Required of Juniors in Engineering and Science. Three hours, first term. Required of Seniors in Engineering and Science-A and -E. Professor Weihe.
3. THEORIES OF HEAT AND LIGHT.—Heat. Thermometry, calorimetry, properties of gases, thermodynamics. Light. Reflection, refraction, spectrum analysis, interference, polarization, optical in-

struments. Three hours, second and third terms. Required of Seniors in Science-A and -E. Professor Weihe.

4. PHYSICAL LABORATORY.—Measurement of length, area and volume, weighing, determination of density, laws of forces and velocities, pendulum, electric and magnetic measurements. Four hours, first term; three hours second term. Required of Juniors in Engineering. Four hours, second and third terms. Required of Juniors in Science. Professor Weihe.
5. PHYSICAL LABORATORY.—Experiments in Electricity, heat, light and sound. Six hours, first term. Required of Seniors in Science-T and -E. Six hours, second and third terms. Required of Seniors in Science-C and -E. Four hours, first term. Required of Seniors in Engineering. Professor Weihe.

HISTORY.

1. AMERICAN HISTORY.—The entire time is devoted to State and United States History. Moore's *History of North Carolina*, Lee's *History of the United States*. One hour. Required of all Freshmen. President Holladay.
2. ANCIENT AND MEDIÆVAL HISTORY.—History of Egypt, Assyria, Phonecia, the Hebrew Nation, Greece and Rome. An introduction to Modern History as far as the time of Charlemagne, comprising a brief view of the Federal System and the Age of Chivalry. Lectures and Swinton's *Outlines of the World's History*. One hour. Required of all Sophomores. President Holladay.
3. ENGLISH HISTORY.—Abstracts of English History from various sources, and Green's *Short History of the English People*. One hour. Required of all Juniors. President Holladay.
4. ECCLESIASTICAL AND MODERN HISTORY.—Evidences of Scripture, historically considered, and a short study of the history of the nineteenth century. Alexander's *Evidences*, Robertson's *Contemporary History*. One hour. Required of all Seniors. President Holladay.

BOOK-KEEPING.

1. BOOK-KEEPING.—The work in the text-books supplemented by numerous original examples and sets for practice. One hour, second and third terms. Required of all Sophomores. Mr. Wright.

MILITARY SCIENCE AND TACTICS.

1. MILITARY TACTICS.—The instruction is in Infantry Drill Regulations, close and extended order, including the School of the Soldier, Company and Battalion, and embraces also recitations or lectures on Military Science. One hour. Required of all Seniors. Mr. Wootten.

BATTALION ORGANIZATION.

Major—B. J. Wootten, Commandant.
First Lieutenant and Adjutant—C. L. Mann.
First Lieutenant and Quartermaster—A. S. Lyon.
Sergeant Major—H. A. Huggins.
Principal Musician—A. T. Smith.
Color Sergeant—F. D. Ross.
Color Corporals—I. N. Sanders and M. Kellogg.

Rank.	Company A.	Company B.	Company C.
Captain:	Mark Squires.	F. M. Foy.	W. A. Syme.
1st Lieutenant:	C. B. Williams.	O'K. W. Myers.	W. D. Alexander.
2d Lieutenant:	E. L. Parker.	A. P. Steele.	J. H. Birdsong.
1st Sergeant:	E. Wood.	R. L. Bernhardt.	G. Jones.
2d Sergeant:	B. H. Finch.	J. E. Porter.	J. B. Hall.
3d Sergeant:	M. M. Harris.	J. H. Bunn.	J. W. Shore.
4th Sergeant:	I. O. Schaub.	R. M. Wagstaff.	L. H. Mann.
5th Sergeant:	S. A. Vest.	R. H. Morrison.	L. G. Berry.
1st Corporal:	T. H. Barnhardt.	Z. M. Bowden.	J. E. Ramsay.
2d Corporal:	C. U. Harris.	R. N. Welfare.	F. N. Bonitz.
3d Corporal:	W. S. Sturgill.	B. O. Hood.	L. O. Lougee.
4th Corporal:	E. O. Smith.	J. E. Pearson.	J. S. Whitley.

Note.—The uniform of cadet gray costs $16.85.

GENERAL INFORMATION.

EQUIPMENT AND FACILITIES.

Agriculture.—The equipment of the farm is as follows: Large basement barn, 50 x 72 feet, three stories; first floor occupied by cattle; second story, by horses, machinery, tools, grain bins, etc.; third story, by hay, which is elevated by a Ricker & Montgomery hay-carrier. Just outside the barn are two seventy-ton circular silos. These are connected with a No. 18 Ohio Standard feed and ensilage cutter. The power for cutting is supplied by an eight-horse power Skinner engine. The dairy building contains three rooms and a cellar, besides a large room above, used as an Agricultural Society hall, in which the students' Agricultural Society meets on Saturday nights. The dairy is supplied with a De Laval Separator, Babcock Tester, rectangular churn, butter worker, cheap heating apparatus, etc. The cellar is cemented, and has a cemented trough on one side, through which flows water from a spring situated above the dairy. This is an abundant water supply and serves a useful purpose in ripening cream.

The live stock consists of two grade percheron mares, two mules, a few specimens of pure bred Jersey and Holstein-Friesian cattle, with their grades, and purchased native and grade cows. Poland China swine are bred pure and from high-class specimens, from which breeding stock will be sold as a part of the farm productions.

Horticulture.—There are five communicating green-houses separated by glass partitions so that different night temperatures can be maintained to suit the various purposes to which the houses are devoted. In addition, there is one glass structure, without heat, for the culture of foreign grapes. Here is kept a general collection of plants for botanical study and for practice in Floriculture, and in two of the houses winter forcing of vegetables and fruits is carried on; in order that the students may have practice in a line of work that is rapidly assuming commercial importance in the State. The building and green-houses are heated throughout by hot water in the most complete manner.

The entire basement of Primrose Hall is used as a Horticultural Laboratory, where practice in grafting, potting and cross fertilization of plants is constantly going on.

Botany.—The Botanical Laboratory is equipped with sixteen compound microscopes of the best American and European makes, a supply of dissection lenses, and chemicals and staining fluids used in histological work. The Herbarium is fairly good, and is being added to by collec-

tions and exchanges. The collection of seeds of weeds and cultivated plants is very full, and is an important factor in the acquirement of a knowledge of the appearance of various seeds and fruits. It is intended, as rapidly as possible, to fully equip the laboratory for advanced work in bacteriology.

Chemistry.—The chemical laboratories are in the main building. They are supplied with fume closets, evaporating baths, drying chambers, blast lamps, and extra tile-covered tables. The tables are of yellow heart-pine, with oak tops. Each student is provided with one large and two small drawers, and one cupboard for keeping apparatus. Each working space is provided with gas, distilled water, re-agents, and a sink. The laboratory of quantitative analysis will accommodate thirty-two students, sixteen of whom may work simultaneously, and the laboratory of general chemistry will accommodate fifty-six students, twenty-eight of whom may work simultaneously.

The chemical library contains a carefully selected list of standard reference books and chemical journals, which the more advanced students are expected to use very freely.

Physics and Electrical Engineering.—The recitation-rooms and laboratories of the Department of Physics and Electrical Engineering are situated in the basement of the principal building. They are spacious, well lighted and provided with a number of solid brick piers built directly on the ground. A dark room for general optical work, and particularly for photometric measurements, has been provided.

The equipment consists of apparatus for illustrating the principles of physical science and for instruction and practice in experiments, measurements and testing. The instruments are all up-to-date and well selected, and are particularly efficient for work in electricity.

In the electrical engineering laboratory are one series, one shunt and one compound dynamo and two alternators. Connections have also been made with the electric plant of the city of Raleigh, enabling more advanced students to do some testing with strong currents and three phase currents. The electric light plant of the College is also used for commercial testing.

The department possesses a very good library of standard books on all branches of physics. The students are referred to them in their work.

Mechanical Engineering.—The drawing and recitation-rooms, laboratory and shops of the Department of Mechanical Engineering are in the Engineering Building. They are of ample size and well lighted, and are arranged to be heated either by the exhaust steam from the engine or by live steam. On the first floor are a recitation-room, engineering laboratory, machine shop, forge shop, wood-turning shop, and carpenter shop. On the second floor are the office, three drawing-rooms, a recitation-

LATHE ROOM.

room and a library. In the latter various scientific and technical journals are kept on file, the trade circulars of prominent engineering firms, drawings and photographs of machinery, and tabulated data, as well as a large number of engineering books, the use of which is required. In this way modern engineering practice is made in a measure familiar.

The laboratory is provided with the necessary apparatus for making boiler and engine tests and other work of an experimental character. The equipment consists of a two-horse power engine, a ten-horse power engine (both of which were built by the students), a large Ericsson hot-air pumping engine, a machine for testing belt friction, apparatus for making analysis of flue gases, a hydraulic ram, a large Sturtevant fan and engine, a small water-motor, a Worthington water-meter, friction brakes, weirs, indicators, planimeters, slide rules, thermometers, calorimeters, a Crosby gauge tester, tanks, scales, and other apparatus for making tests.

In addition to the laboratory, there is a boiler-house equipped with three thirty-horse power boilers, several pumps, and a jet condenser, all of which are available for experimental purposes.

The shops are equipped as follows:

The carpenter shop contains thirty-four carpenters' benches and all the necessary tools for each bench.

The wood-turning shop contains ten 12-inch-swing lathes, a saw and dado machine, a 20-inch planer, a mortising and boring machine, a 30-inch band saw, a large jig saw, a 6-inch sticker, a mitering machine, a grindstone, a steam glue-pot, and six benches equipped with iron vises and all the tools necessary for pattern-making. Each lathe is fully equipped with turning tools.

The forge shop contains twenty-three forges, each of which is provided with an anvil and forging tools, besides which there is a full equipment of tools for general use in the shop.

The machine shop contains a 16-inch-swing Davis & Egan lathe with 10-foot bed, a 14-inch Winsor lathe with 3-foot bed, a 13-inch Barnes lathe with 5-foot bed, a 24-inch upright Bickford drill press, a Brown and Sharp universal milling machine with all attachments, a 20-inch by 5-foot Pease planer, a large emery tool-grinding machine and six vises with benches and lockers.

The tool-room is well equipped with the necessary hand and pipe tools.

The power for the shops is furnished by a 25-horse-power Woodbury engine. When the shops are running, one of the students has charge of the engine and another of the boilers.

BUILDINGS.

Main Building.—This is of brick, with brownstone trimmings, and is 70 by 60 feet; part four stories in height, and the remainder two. The

lower floors contain the offices of the President and the Bursar; the library; several recitation rooms; chemical and physical laboratories, the chapel, and the armory. The upper stories are occupied by students. In this, as in the other bui dings, every precaution has been taken to secure good sanitation. The rooms are all well lighted, well ventilated and conveniently arranged.

Engineering Building.—This is a plain, substantial, two-story brick building, with large annex. It contains the laboratories, drawing-rooms and recitation-rooms, and shops of the department.

Boiler House.—This is a single-story brick building, containing boilers, fire-pump, and the machinery connected with the steam-heating plant.

Primrose Hall and Plant Houses.—This is a two-story brick building, which has attached a fine range of glass structures. The lower, or basement floor, is occupied by the Horticultural laboratory and boiler-room. The upper floor contains a large lecture-room, and a laboratory. The plant-houses are five in number, and are immediately accessible from the lecture-rooms and laboratories.

Dairy and Barn.—These are frame buildings, of modern design, and carefully planned for the purposes to which they are devoted. The barn is 50 by 72 feet and three stories high; the dairy is 20 by 40 feet and two stories high, the upper story being used as the Agricultural Society hall.

Watauga Hall.—This commodious three-story brick building was named in honor of the Watauga Club, which was largely instrumental in securing the establishment of the College. The first floor contains a kitchen, a dining-room and a cloak-room, while in the upper stories are twenty-six rooms used as dormitories. In the basement are seven conveniently arranged bath-rooms, each having a shower, provided with hot and cold water. These are available for the use of the students at all proper times.

Dormitories.—The College has four brick buildings, used exclusively as dormitories, containing a total of fifty-four rooms.

The Infirmary.—This is a two-story brick building with granite trimmings and slate roof. On the first floor are five rooms, a large hall, kitchen, and bath-room. The matron's apartments are on this floor. On the upper floor are three hospital wards, two large bath-rooms, a linen room, a doctor's office and medicine closet. All of the rooms are provided with large windows, and with doors that open to porches. The building is lighted by electricity, and is well provided with speaking-

tubes. The hospital wards are provided with enameled beds, single, and the floors are waxed and stained, and all the plastering has soapstone finish and is perfectly sanitary.

WATER SUPPLY.

To meet the need of a pure and plentiful supply of water, the College had twelve driven wells put in. The depth of these wells is from 55 to 80 feet. The water is pumped for distribution from these wells into three large tanks, and also into one fire reservoir.

LIGHT AND HEAT.

All the buildings are heated by steam, and are lighted by incandescent electric lamps from an electric plant belonging to the College.

DIVISION OF SESSION.

The session is divided into three terms, designated as First, Second and Third Terms.

Although students will be admitted at any time, the best time to enter College is at the beginning of the scholastic year, with the First Term. Students desiring to enter as late as the Third Term will find it impossible to pass the necessary examinations, unless they have already attended similar colleges, and had better wait till the beginning of another session.

Any student desiring to enter the Sophomore or other higher class, omitting the earlier classes, will be required to stand an examination which will show ample preparation for the class he may wish to enter.

REPORTS.

Reports of deportment and absence from college duties are sent to parents or guardians at the end of every month, and attention is called to any lack of diligence on the part of the student.

Reports of scholarship and deportment are likewise sent at the end of each term. In the grading, 100 is the maximum, 90 or over is considered excellent, 80 or over creditable; 60 is the lowest mark that will entitle the student to pass to a higher class. In calculating the average for the term the subjects count equally.

HONORS.

The Punctuality Roll contains the names of students who have not been absent from a single exercise during the year.

The Honor Roll contains the names of those whose average in all studies for the year is 90 or more.

Special mention is made at graduation of any student whose average in any study during his Junior or Senior year was above 90.

First Distinction is given in each course to the member of the graduating class who makes the highest average for the course, provided such average for the whole course is above 90.

Students attaining first distinction are entitled to deliver commencement orations.

DEGREES.

One Baccalaureate degree is conferred. Upon those who have successfully passed all the examinations in the various studies of the course in Agriculture, the course in Science, or the course in Engineering, the degree of Bachelor of Science (B. S.) is conferred.

The advanced degrees of M. S., M. E., C. E. and E. E. are given in accordance with the requirements specified under the head of Post-Graduate Courses. The fee for the Baccalaureate diploma is three dollars; for the diploma accompanying the higher degrees, five dollars is charged.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

The various Christian denominations are well represented in the student body, and all unite in a Young Men's Christian Association, which meets with regularity and exerts a beneficial influence throughout the College.

LITERARY SOCIETIES.

There are two literary societies in the College, the Pullen and the Leazar, and both are sustained with energy and spirit. They afford abundant opportunity for improvement in declamation, debate, parliamentary law and composition, and students will find in either congenial associations.

TECHNICAL SOCIETIES.

The Agricultural Society, Mechanical Society, and Berzelius (Chemical) Society have been organized by the students taking most interest in these special departments of study. Their work consists in reviews of the various technical journals, and in original papers.

ALUMNI ASSOCIATION.

This Association of the College graduates meets annually during Commencement week, and aids in recalling the pleasant memories of College days, as well as keeping its members in active touch with their *Alma Mater*.

Following are the officers of the Association for the current year:

President, C. B. Williams, '93, Raleigh, N. C.

Vice-President, S. G. Kennedy, '97, Coahoma, N. C.

Secretary and Treasurer, H. W. Primrose, '97, Raleigh, N. C.

Chairman Executive Committee, Chas. Pearson, '94, Raleigh, N. C.

COLLEGE BARN.

LIBRARY.

The Library now contains about three thousand books and magazines. Additions are being made every year, and the way now seems clear for rapidly increasing the numbers.

There are reference libraries for the use of students placed in the departments of Agriculture, Horticulture, Chemistry, Physics, English, Mechanical and Civil Engineering.

LABOR.

On the farm and about the College certain work can be performed by the students. For all such labor, not instructive and a part of the College course, students who perform it will be paid *seven* cents per hour. As this labor has to be apportioned among many, no first-year student can hope to make more than two or three dollars a month in this way.

PRIZES.

A prize of ten dollars is given to the Freshman student who, in addition to his class work, earns the largest amount of money by his skill in agricultural labor outside, and a second prize of five dollars is given to the student who, in addition to his class work, earns the next largest amount of money by his skill in agricultural labor outside.

DISCIPLINE.

There must be order and decorum throughout the College, though the methods of securing both will appeal to the self-respect of the student, rather than to the dread of penalties.

For minor deficiencies or irregularities, proportional demerit marks will be noted on the report, sent to parents or guardians monthly and at the end of each term. It is hoped that parents will inquire into the cause of such evidences of demerit and hold their sons to a strict account for them, since if a student is thoroughly in earnest, it is quite possible for him to pass through his course without incurring one deficiency mark.

Students who persist in grave misconduct will not be permitted to remain in the College. The indolent and vicious are not wanted, will not be tolerated, and had best not attempt to enter where a student must work or leave. There is no room in our system for idlers.

STUDENTS.

Age and Qualifications.—Applicants for the Freshman Class must be at least fifteen years old, and must, if required, furnish satisfactory evidence of good moral character. They must pass satisfactory examinations on the following subjects: 1st. Arithmetic through common and

decimal fractions. The examination will cover the ground laid down in such standard arithmetics as Wentworth or Milne. 2d. In English, applicants will be examined on the elements of the language—the examination including the matter treated in such books as Reed and Kellogg's First Lessons, or Harvey's Grammar. 3d. In Geography the applicant is expected to be familiar with work of the grade of Maury's Manual. 4th. In History the examination will be confined to the main events in American History.

Pay and County Students.—The law provides for two kinds of students—pay and county students. There is no limit to the number of pay students. They pay for tuition and for their lodging in the College buildings, while the county students are entitled to tuition and to their lodging in the College buildings free of cost. The expenses of a pay student are only $30 a year more than those of a county student. Each county is entitled to as many county students as it has members in the House of Representatives. Young men desiring to enter as county students must apply to the County Board of School Commissioners, who alone have authority to make such appointments, as the College authorities cannot make them.

ADMISSION.

The County Superintendent of Schools is required by act of 1899, to conduct in his county the examination of all applicants for admission. This examination will be held at the county-seats on the second Thursday of July. For any special reason the County Superintendent may hold an additional examination, if necessary.

All young men, however, wishing to enter, can be examined at the College on the day before its opening, if they did not pass the examination at the county-seats. These will be held at the following hours: Mathematics, 9 a. m.; English, 11 a. m.; Geography, 2 p. m.; History, 3:30 p. m. Examinations for conditioned students and for applicants for advanced classes will be held also on these days.

Students, after arriving in Raleigh, must report at once to the President of the College for a permit for examination or for registration.

Students who have passed the examinations for admission, or for advancement to a higher class, will report to the Registrar for registration.

GENERAL RULES.

Every young man, on becoming a member of the College, thereby pledges his obedience to the rules, a printed copy of which will be furnished him, and to a diligent performance of his duties.

No student in this College will be allowed to join any military organization, and no applicant for admission belonging to any military organ-

THE NORTH CAROLINA

COLLEGE OF AGRICULTURE AND MECHANIC ARTS,

PRESIDENT'S OFFICE.

WEST RALEIGH, N. C.,

Feby. 2/00.

Prof Ira O Baker,
University Of Illinois,
Champaign, Ill

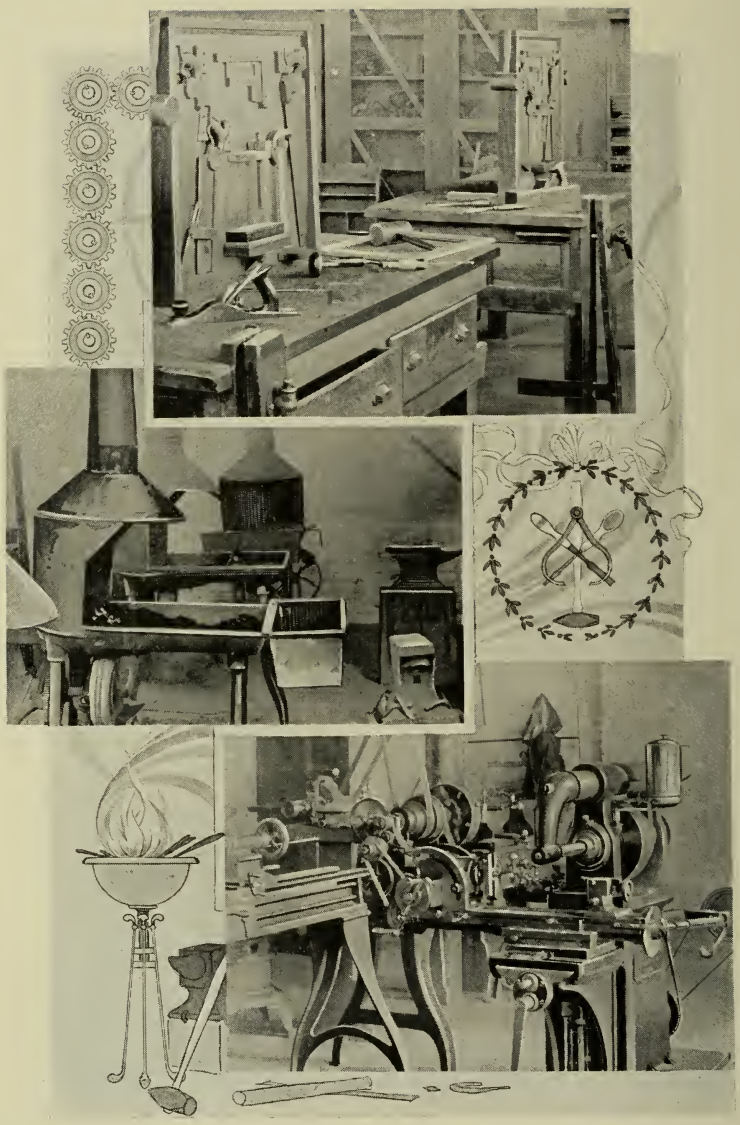
Dear Sir:-

Your letter of Jan 19th has been received. This college only confers the B. E. degree. We have some 250 students taking the Engineering Courses of study.

Very truly

A. & M. Bowen

Registrar.



CARPENTER SHOP. BLACKSMITH SHOP. MACHINE SHOP.

ization shall be allowed to enter until he shall have filed with the Registrar a certificate of withdrawal from active membership in such organization.

Students are expected at all times to demean themselves in a quiet, gentlemanly manner, and no student will be allowed to remain in the institution who, by misconduct or indolence, shows himself unworthy of its benefits.

All students will be required to attend morning prayer in the chapel.

On Sunday morning, students must attend the church service in Raleigh, each student being allowed to select the church.

Each occupant of a dormitory is expected to keep his room in good order and ready for inspection at any time.

CLOTHING, ETC.—Each student is required to have one suit of uniform. *Each student living in the College must bring with him a change of sheets and pillow-cases, four towels and two counterpanes, plainly marked.*

TUITION.

Tuition is $20 per scholastic year. County appointees are entitled to tuition and lodging *free of cost.* Post-graduates are excused from tuition fees.

BOARD AND LODGING.

Board and lodging are furnished all county students at $8 per month. To all other students who may desire it, and to the extent of our accommodations, board will be furnished at $8 per month, and lodging as below stated.

Board is payable monthly, in advance.

COLLEGE CHARGES PER SESSION OF NINE MONTHS.

1. Tuition	$ 20 00
2. Lodging (including room, furniture, bedding, etc.)	10 00
3. Incidental fee (in advance)	1 00
4. Medical fee and medicine (one-half upon entrance, remainder on January 15)	4 00
5. Fuel and lights for entire session	12 50
6. Board, eight dollars per month, in advance	72 00
	$119 50

It will be seen that the aggregate charge for tuition, lodging, and fuel and lights is $42.50. This must be paid as follows, viz.: for first eight months, at beginning of each month, $4.75; on May 1, ninth month, $4.50.

Besides board, incidental fee and medical fee, students holding county appointments pay for fuel and lights only, as follows, viz.: for first eight months, at beginning of each month, $1.40; on May 1, ninth month, $1.30.

Tuition of students who do not lodge in the College buildings, $20, must be paid monthly, as follows, viz.: for first eight months, at beginning of each month, $2.25, and on May 1, ninth month, $2.

Board should be paid to the Steward of the College, fees and dues to the Bursar.

The military uniform suit costs $16.85, and must be paid for when furnished.

Please bear in mind that ALL PAYMENTS MUST BE MADE IN ADVANCE. Failure to comply with this requirement will subject a student to dismissal.

Each student must make good all apparatus, etc., he breaks, and for this purpose must make a deposit at the beginning of the year.

All students must furnish their own books, stationery, and drawing instruments and materials.

STUDENTS.

POST-GRADUATES (15).

Name.	*Post Office.*	*County.*	*Major Course.*
James Adrian Bizzell,	Dunn,	Harnett,	Chemistry.
B. S. '95, N. C. College of Agriculture and Mechanic Arts.			
John William Carroll,	West Raleigh,	Wake,	Agriculture.
B. S. '97, N. C. College of Agriculture and Mechanic Arts.			
Wm. Alex. Graham Clark,	Raleigh,	Wake,	Civil Eng.
B. S. '97, N. C. College of Agriculture and Mechanic Arts.			
Anson Eliken Cohoon,	Elizabeth City,	Pasquotank,	Chemistry.
B. S. '98, N. C. College of Agriculture and Mechanic Arts.			
Hugh McCollum Curran,	Westboro, Mass.,		Agriculture.
B. S. '98, N. C. College of Agriculture and Mechanic Arts.			
Benjamin Cary Fennell,	Raleigh,	Wake,	Mech. Eng.
B. S. '98, N. C. College of Agriculture and Mechanic Arts.			
Charles Duffy Francks,	Richlands,	Onslow,	Mathematics.
B. E. '93, N. C. College of Agriculture and Mechanic Arts.			
Chris. Miller Hughes,	Raleigh,	Wake,	Chemistry.
B. E. '95, N. C. College of Agriculture and Mechanic Arts.			
Edward Bentley Owen,	Michael,	Davidson,	English.
B. S. '98, N. C. College of Agriculture and Mechanic Arts.			
Hugh Williams Primrose,	Raleigh,	Wake,	Chemistry.
B. S. '97, N. C. College of Agriculture and Mechanic Arts.			
Abram Hinman Prince,	Henderson,	Vance,	Biology.
B. S. '95, N. C. College of Agriculture and Mechanic Arts.			
Thomas Jehu Smithwick,	Sans Souci,	Bertie,	Mech. Eng.
B. S. '97, N. C. College of Agriculture and Mechanic Arts.			
Numa Reid Stansel,	Allenton,	Robeson,	Elect. Eng.
B. S. '98, N. C. College of Agriculture and Mechanic Arts.			
George Frederick Syme,	Raleigh,	Wake,	Civil Eng.
B. S. '98, N. C. College of Agriculture and Mechanic Arts.			
J. Lea Watson,	Raleigh,	Wake,	Mech. Eng.
B. S. '97, N. C. College of Agriculture and Mechanic Arts.			

SENIORS, CLASS OF 1899 (21).

Name.	*Post Office.*	*County.*
William Davidson Alexander, Jr.,	Croft,	Mecklenburg.
Ira Wilson Barber,	Culler,	Stokes.
John Henderson Birdsong,	Raleigh,	Wake.
Francis Marion Foy, Jr.,	Scott's Hill,	Pender.
Kimbrough Jones, Jr.,	Raleigh,	Wake.

Name.	*Post Office.*	*County.*
Albert Sidney Lyon,	Wilton,	Granville.
Carroll Lamb Mann,	Engelhard,	Hyde.
O'Kelly Williams Myers,	Washington,	Beaufort.
Eugene Leroy Parker,	Raleigh,	Wake.
Eugene Gray Person,	Louisburg,	Franklin.
Frederick Erastus Sloan,	Statesville,	Iredell.
Mark Squires,	Lenoir,	Caldwell.
Alexis Preston Steele,	Statesville,	Iredell.
Ralph Bingham Sykes,	Rock Spring,	Orange.
William Anderson Syme,	Raleigh,	Wake.
Irving Burchard Tucker,	Fair Bluff,	Columbus.
Hugh Ware,	King's Mountain,	Cleveland.
Claude Burgess Williams,	Elizabeth City,	Pasquotank.

Irregular Seniors (3).

Samuel Young Bryson,	Hendersonville,	Henderson.
Andrew Thomas Smith,	Oxford,	Granville.
Darius Samuel Waitt,	Raleigh,	Wake.

CLASS OF 1900—JUNIORS (34).

Kemp Alexander,	Harrisburg,	Cabarrus.
Leslie Graham Berry,	Washington,	Beaufort.
James Harry Bunn,	Henderson,	Vance.
Paul Collins,	Raleigh,	Wake.
Brantley Hilliard Finch,	Lexington,	Davidson.
Bertie Mason Graves,	Selma,	Johnston.
James Baker Hall, Jr.,	Scotland Neck,	Halifax.
Samuel Merrill Hanff,	Raleigh,	Wake.
George Roland Harrell,	Kelford,	Bertie.
Marion Morgan Harris,	Fairfield,	Hyde.
William Theophilus Hinton,	Greensboro,	Guilford.
Henry Allen Huggins,	Wilmington,	New Hanover.
Garland Jones, Jr.,	Raleigh,	Wake.
Louis Henry Mann,	Middleton,	Hyde.
Charles Elbert Moore,	Moyton,	Wilson.
Robert Hall Morrison,	Mariposa,	Lincoln.
William Leak Peace,	Oxford,	Granville.
Junius Edward Porter,	Emerson,	Bladen.
Roger Francis Richardson,	Selma,	Johnston.
William Edwin Rose,	Statesville,	Iredell.
Floyd De Ross,	Charlotte,	Mecklenburg.
Ira Obed Schaub,	Culler,	Stokes.

Name.	*Post Office.*	*County.*
John Wade Shore,	Booneville,	Yadkin.
William Turner Smith,	Godwin,	Cumberland.
John Thomas Talton,	Smithfield,	Johnston.
Thomas Fuller Terrell,	Raleigh,	Wake.
Simpson Alexander Vest,	Tobaccoville,	Forsyth.
Roscoe Marvin Wagstaff,	Olive Hill,	Person.
Gaither Hall Whiting,	Raleigh,	Wake.
Edward Wood,	Edenton,	Chowan.

Irregular Juniors (4).

Leslie Lyle Allen,	Louisburg,	Franklin.
Robert Linn Bernhardt,	Salisbury,	Rowan.
William Eaton Fenner,	Halifax,	Halifax.
William Montgomery Person,	Kittrell,	Vance.

CLASS OF 1901—SOPHOMORES (56).

William Augustus Ashley,	Raleigh,	Wake.
Fletcher Hess Barnhardt,	Norwood,	Stanly.
William Osborne Bennett, Jr.,	Wadesboro,	Anson.
Fred Wilhelm Bonitz,	Wilmington,	New Hanover.
Zolly Mosby Bowden,	Redland,	Davie.
William Dunn Briggs,	Raleigh,	Wake.
John Oscar Busick,	Madison,	Rockingham.
William Pescud Craig,	Marion,	McDowell.
William Lois Craven,	Concord,	Cabarrus.
Felix Gray Crutchfield,	Winston,	Forsyth.
John Witherspoon Daniel,	Raleigh,	Wake.
George Maslin Davis,	Winston,	Forsyth.
John Neal Davis,	Louisburg,	Franklin.
Errol Patrick Dixon,	Kinston,	Lenoir.
William Dollison Faucette,	Halifax,	Halifax.
Harris Augustus Fetner,	Raleigh,	Wake.
Leslie Gibbs,	Middleton,	Hyde.
Charles Bennett Griffin,	Lewiston,	Bertie.
Charles Upchurch Harris,	Raleigh,	Wake.
Thomas Jason Herring,	Kinston,	Lenoir.
William Michael Hoke,	Lincolnton,	Lincoln.
Benjamin Oliver Hood,	Asheville,	Buncombe.
Martin Kellogg,	Sunbury,	Gates.
Centennial Hill King,	Raleigh,	Wake.
Jesse James Liles,	Wadesboro,	Anson.
Lewis Omer Lougee,	Raleigh,	Wake.
Colon Reid Love,	Manndale,	Chatham.

Name.	*Post Office.*	*County.*
David Johnson Lybrook,	Winston,	Forsyth.
John Luther McKinnon,	Laurinburg,	Richmond.
James Leslie McNair,	Wilmington,	New Hanover.
Charles Harden McQueen,	Morven,	Anson.
Lemuel Octave Moseley,	Kinston,	Lenoir.
Zebulon Vance Murphrey,	Kinston,	Lenoir.
William Alfred Myatt, Jr.,	Raleigh,	Wake.
Leslie Monteiro Norman,	Richmond,	Henrico, Va.
William Franklin Pate,	Snow Hill,	Greene.
Boyd Charles Pattee,	Singer Glenn,	Rockingham, Va.
John Ellis Pearson,	Saluda,	Polk.
John Ramsay,	Salisbury,	Rowan.
William Matthews Robinson,	Charlotte,	Mecklenburg.
Isaac Newton Sanders,	Swansboro,	Onslow.
Edward Oscar Smith,	Crystal Hill,	Halifax, Va.
Frank Patillo Smith,	Guilford College,	Guilford.
Walter Stephen Sturgill,	Sturgill,	Ashe.
Beverly Nathaniel Sullivan,	Winston,	Forsyth.
Richard Eppie Timberlake,	Youngsville,	Franklin.
Charles Augustus Watson,	Raleigh,	Wake.
Robert Noble Welfare,	Lexington,	Davidson.
John Smallwood Whitley,	Williamston,	Martin.

Irregular Sophomores (8).

David Worth Bagley,	Raleigh,	Wake.
Thomas Milton Costen,	Sunbury,	Gates.
Clarence Alfred Flowers,	Vandemere,	Pamlico.
Alfred Galloway Hankins, Jr.,	Wilmington,	New Hanover.
William Branch Jones,	Raleigh,	Wake.
George Washington Shepard,	Topsail,	Pender.
Hilary Emory Sykes,	Rock Spring,	Orange.
John Seaton Welch,	Apex,	Wake.

CLASS OF 1902—FRESHMEN (87).

Robert Lee Adams,	Gastonia,	Gaston.
Walter Lamar Alexander,	Charlotte,	Mecklenburg.
Alonzo Ohio Alford,	Raleigh,	Wake.
Walter Caiss Boesch,	Wilmington,	New Hanover.
William McDowell Burgin, Jr.,	Marion,	McDowell.
Benjamin Bowden Carr, Jr.,	Mount Olive,	Duplin.
William Wiggins Caserley,	Warrenton,	Warren.
Junius Sidney Cates,	Swepsonville,	Alamance.

Name.	*Post Office.*	*County.*
Alexander Chatham,	Elkin,	Surry.
William Austin Clark,	Elizabethtown,	Bladen.
Alexander Lillington Clark,	Weldon,	Halifax.
Roy Graham Craver,	Reeds,	Davidson.
George Francis Marion Dail,	Snow Hill,	Greene.
Joseph Samuel Davis,	Purley,	Caswell.
Henry Grady Dorsette,	St. Lawrence,	Chatham.
Allie Drake,	Hendersonville,	Henderson.
Herbert Dysart	Marion,	McDowell.
William Columbus Ernull,	Askin,	Craven.
Paul Fletcher Faison,	Raleigh,	Wake.
Samuel Isaac Farnell,	Ward's Mill,	Onslow.
George Ramsey Fearing,	Elizabeth City,	Pasquotank.
Joseph Edgar Fulp,	Fulp,	Stokes.
Walter Lindsay Fulp,	Fulp,	Stokes.
Joseph Nelson Garren,	Limestone,	Buncombe.
Thomas Whitmel Griffin,	Lewiston,	Bertie.
Wade Hampton Hadley,	Siler City,	Chatham.
Robert Irving Howard,	Conetoe,	Edgecombe.
William Franklin Ingram,	Mount Gilead,	Montgomery.
Albert Ransom Johnson,	Yale,	Henderson.
John Samuel Johnston,	Leasburg,	Caswell.
Edgar Pelopidas Leach,	Raleigh,	Ware.
Henry Faison Lee,	Faison,	Duplin.
Edmund Shaw Lytch,	Laurinburg,	Richmond.
Miles Washington Maske,	Polkton,	Anson.
Dewey Hobbs McCullen,	Faison,	Sampson.
Ernest McCurry,	Murfreesboro,	Hertford.
George Meyers McDonald,	Rockingham,	Richmond.
Daniel Neill McLean,	Maxton,	Robeson.
Charlie Owen McNair,	Wilmington,	New Hanover.
James Purdie McNeill,	Conway,	Horry, S. C.
John Miller Monie,	Raleigh,	Wake.
Laurie Moseley,	Kinston,	Lenoir.
Vassar Young Moss,	Zacho,	Granville.
Arcus Edward Myers,	Reeds,	Davidson.
Fred Joseph Parham,	Monroe,	Union.
James Avon Lafayette Parker,	Cypress Creek,	Bladen.
George Davis Parsley, Jr.,	Wilmington,	New Hanover.
George Franklin Pipkin,	Princeton,	Johnston.
Theodore Ober Pomeroy,	Graham,	Alamance.
Edward Purdie,	Godwin,	Cumberland.
William Benedict Reinhardt,	Reinhardt,	Lincoln.
Frederick Lawton Rich,	Seven Springs,	Wayne.

Name.	*Post Office.*	*County.*
William Sidney Smethurst,	Raleigh,	Wake.
Sidney Haywood Smith,	Lexington,	Davidson.
Marvin Greene Smith,	Raleigh,	Wake.
William Ernest Snow,	High Point,	Guilford.
Russell Elstner Snowden,	Elizabeth City,	Pasquotank.
William Stamey Stacy,	Morganton,	Burke.
George Manly Stanback,	Mangum,	Richmond.
Leroy Clark Steele,	Turnersburg,	Iredell.
Samuel Lanair Stringfield,	Waynesville,	Haywood.
John Houston Squires,	Lenoir,	Caldwell.
Arthur Kendal Thomas,	Thomasville,	Davidson.
Stephen Hull Threadgill, Jr.,	Wadesboro,	Anson.
Joseph Platt Turner,	Norwood,	Stanly.
Wright Elbert Upchurch,	Raleigh,	Wake.
Alfonso Lewis Walker,	Raleigh,	Wake.
Cleveland Welch,	Waynesville,	Haywood.
Fred Stanly Whitaker,	Kinston,	Lenoir.
Horace Joseph Williams,	Raleigh,	Wake.
Charley Gaither Woodruff,	Mocksville,	Davie.
Yasotaro Yezoye,	Tokyo, Japan.	

Irregular Freshmen (15).

Bedford Jethro Brown,	Charlotte,	Mecklenburg.
Louis Alexander Brown,	Concord,	Cabarrus.
Oliver Carter,	Garland,	Sampson.
Robert Wallace Cowper,	Winton,	Hertford.
Claud Hooker Daniels,	Bayboro,	Pamlico.
Richard Irby,	Blackstone,	Nottoway, Va.
William Ernest Fillmore King,	Raleigh,	Wake.
Ernest Meadows,	Raleigh,	Wake.
Charles Arthur Nichols,	Barnard,	Madison.
John Adolph Nunn,	New Bern,	Craven.
William Leon Parks,	Seven Springs,	Wayne.
Thomas Stradley Rogers,	Lyons,	Granville.
Louis Murdock Smith,	Raleigh,	Wake.
William Isaiah Thompson,	Faison,	Sampson.
Kennie Raynor Woodard,	Edenton,	Chowan.

SUB-FRESHMEN (29).

Roy Horton Allen,	Raleigh,	Wake.
Zebulon Vance Brinkley,	Manteo,	Dare.
William Gilliam Brown,	Winston,	Forsyth.
Thomas Stuart Coffey,	Boone,	Watauga.

Name.	*Post Office.*	*County.*
William Alfonso Dement,	Raleigh,	Wake.
William Birch Douglass,	Raleigh,	Wake.
Toney Dughi,	Raleigh,	Wake.
Delma Dacota Ellington,	Raleigh,	Wake.
Harmon Edward Grimsly,	Newbern,	Craven.
Guy Blunt Hardy,	Kinston,	Lenoir.
Robert Edward Hardy,	Snow Hill,	Greene.
Charles Wesley Jones,	West Raleigh,	Wake.
Hubert Ben Lawrence,	Beck,	Wake.
Chester Arthur Martin,	Raleigh,	Wake.
Jesse Edgar Parker,	Selma,	Johnston.
Julian Valencourt Perkins,	Washington,	Beaufort.
Robert Owen Primrose,	Raleigh,	Wake.
Julius Rowan Rogers, Jr.,	Raleigh,	Wake.
James Pickett Rose,	Statesville,	Iredell.
Robert George Russell,	South Lowell,	Durham.
Quincey Bell Satchwell,	Wilmington,	New Hanover.
Thomas Shepherd,	Hendersonville,	Henderson.
Archie Woodman Sidbury,	Topsail Sound,	Pender.
Howard Simpson,	Simpson's Store,	Rockingham.
Stanly Gorde Smith,	Raleigh,	Wake.
Benjamin Tharp Spruill,	Franklinton,	Franklin.
Robert Morrison Sutton,	Candor,	Montgomery.
Claud Taylor,	West Raleigh,	Wake.
Nicholas William West, Jr.,	Raleigh,	Wake.

AGRICULTURAL SPECIALS.

Alton Edwin Ames,	East Fairfield,	Somerset, Me.
James Stuart Branch,	West Raleigh,	Wake.
John Lyon Bullock,	Hester,	Granville.
Elmer Washington Burch,	Ronda,	Wilkes.
John Drury Burton,	Ridgeville,	Caswell.
Edgar Persons,	Waynesville,	Haywood.
William Osmond Smith,	Guilford College,	Guilford.
Lee Sprinkle,	Marshall,	Madison.
James Allen Turlington,	Ora,	Sampson.
Paul Julius Welch,	Wanesville,	Haywood.

COMMENCEMENT, 1898.

BACCALAUREATE SERMON

BY

THE REV. HARTLEY P. CARMICHAEL, D. D., OF VIRGINIA.

ANNUAL ADDRESS

BY

HON. H. J. W. HAM, OF GEORGIA.

GRADUATES AND SUBJECTS OF THESES.

With the Degree of Bachelor of Science (B. S.).

Name.	*Post Office.*	*County.*
DORSEY FROST ASBURY (E),	Chambers,	Burke.

A Design of a Brick Chimney for a Four Hundred Horse-power Boiler Plant.

SIDNEY HAMILTON BECK (E),	Table Rock,	Burke.

Design and Construction of an Electromagnet.

ANSON ELIKEM COHOON (A),	Elizabeth City,	Pasquotank.

A Design for Laying Out the Grounds around the New Infirmary.

HUGH MCCOLLUM CURRAN (S),	Westboro, Mass.	

Comparative Value of Jadoo and Tropic Fibre for Greenhouse Culture.

BENJAMIN CARY FENNELL (E),	Raleigh,	Wake.

Specifications and Drawings for Heating by Steam the Engineering Building.

ALPHEUS ROUNTREE KENNEDY (E)	Coahoma,	Lenoir.

The Construction of an Instrument for Testing the Magnetic Properties of Iron (John Hopkinson's Model).

FREDERICK CREECY LAMB (S),	Elizabety City,	Pasquotank.

The Effect of Different Alkali Salts on the Solubility of Tricalcium Phosphate in Fertilizers (with Parker).

EDWIN BENTLEY OWEN (A),	Reed's,	Davidson.

A Study of Varieties of Lettuce.

MOORE PARKER (S),	Raleigh,	Wake.

The Effect of Different Alkali Salts on the Solubility of Tricalcium Phosphate in Fertilizers (with Lamb).

NUMA REID STANSEL (E),	Allenton,	Robeson.

Design of a Single Phase Alternating Electric Light Plant for the College.

Name.	*Post Office.*	*County.*
Teisaku Sugishita (E),	Kofufu, Hida, Japan.	

Design of a Steel Highway Bridge.

George Frederick Syme (E),	Raleigh,	Wake.

The Construction of an Instrument for Testing the Magnetic Properties of Iron (S. P. Thompson's Model).

With the Degree of Master of Science (M. S.).

Robert Donnell Patterson, Jr.,	Durham,	Durham.

A System of Farming by Tenants, with Rotations and Some General Rules for the Same.

MEMBERS OF THE GRADUATING CLASS ENTITLED TO SPECIAL MENTION.

A. E. Cohoon, Agriculture and Horticulture.

H. M. Curran, Horticulture, English and Chemistry.

E. B. Owen, Horticulture, Agriculture and Chemistry.

Moore Parker, Chemistry.

N. R. Stansel, English, Mathematics, Electricity, Mechanics, Steam and Drawing.

T. Sugishita, Mathematics and Drawing.

HONOR ROLL.

SENIOR CLASS.

Name.	*Post Office.*	*County.*
Numa Reid Stansel,	Allenton,	Robeson.

PUNCTUALITY ROLL.

FRESHMAN CLASS.

William Augustus Ashley,	Raleigh,	Wake.

FRESHMAN PRIZES IN AGRICULTURE.

TEN DOLLAR PRIZE.

John Smallwood Whitley,	Williamston,	Martin.

FIVE DOLLAR PRIZE.

Charles Bennett Griffin,	Lewiston,	Bertie.

REGISTER OF ALUMNI.

CLASS OF 1893.

Name.	*Degree.*	*Address.*
ROBERT WILSON ALLEN,	B. E.,	Preston, Md.
Prof. Mathematics, Preston Normal School.		
SAMUEL ERSON ASBURY,	B. S.,	Nashville, Tenn.
Assistant State Chemist.		
HENRY EMIL BONITZ,	B. E.,	Wilmington, N. C.
Architect and Superintendent.		
FRANK FULLER FLOYD,	B. E.,	Knoxville, Tenn.
Supt. Linotype Machines for the *Knoxville Sentinel.*		
CHARLES DUFFY FRANCKS,	B. E.,	Richlands, N. C.
Farmer.		
EDWARD MOORE GIBBON,	B. E.,	Port Royal, S. C.
Machinist U. S. Government Dock Yard.		
GEORGE PENDER GRAY,	B. S.,	Silver Lake, Fla.
Farm Manager.		
CHARLES BOLLING HOLLADAY,	B. E.,	Richmond, Va.
With John L. Williams & Sons.		
WILLIAM MCNEILL LYTCH,	B. E.,	Phœnix, Fla.
Locomotive Engineer.		
WALTER JEROME MATHEWS,	B. E.,	Goldsboro, N. C.
Engineer for the Eastern N. C. Asylum for the Insane.		
JAMES WILLIAM MCKAY,	B. E.,	Black Mountain, N. C.
Civil Engineer and County Surveyor.		
FRANK THEOPHILUS MEACHAM,	B. S.,	Morganton, N. C.
Farm Superintendent State School for Deaf and Dumb.		
CARL DEWITT SELLARS,	B. E.,	Altamaha, N. C.
Engineer for Altamaha Cotton Mills.		
CHARLES EDGAR SEYMOUR,	B. S.,	Louisburg, N. C.
Farmer.		
BUXTON WILLIAMS THORNE,	B. E.,	Water Valley, Miss.
Corporation Clerk.		
WILLIAM HARRISON TURNER,	B. E.,	Salem, N. C.
With Wachovia Mills (F. & H. Fries).		
CHARLES BURGESS WILLIAMS,	B. S.,	Raleigh, N. C.
Assistant State Chemist.		
LOUIS THOMAS YARBROUGH,	B. E.,	Durham, N. C.
Manager Southern Bell Telephone Co.		
SAMUEL MARVIN YOUNG,	B. E.,	Raleigh, N. C.
Of Irby & Young.		

CLASS OF 1894.

Name.	*Degree.*	*Address.*
CHARLES EDWARD CORPENING,	B. E.,	Lenoir, N. C.
Farmer.		
DAVID COX, JR.,	B. E.,	Hertford, N. C.
Architect and County Surveyor.		
ROBT. DONNELL PATTERSON, JR.,	B. S.,	Durham, N. C.
With American Tobacco Co.		
CHARLES PEARSON,	B. E.,	Raleigh, N. C.
Of Pearson & Ashe, Architects.		
ZEBBIE GEORGE ROGERS,	B. E.,	Danville, Va.
Secretary and Treasurer.		
JOHN HYER SANDERS,	B. E.,	Chocowinity, N. C.
Locomotive Engineer for Lumber Co.		
BENJAMIN FRANKLIN WALTON,	B. S ,	Neuse, N. C.
Farmer.		
JOHN MCCAMY WILSON,	B. E.,	Salem, N. C.
With Salem Iron Works.		

FRANK THEOPHILUS MEACHAM, M. S., Morganton, N. C.
See Class of 1893.

CLASS OF 1895.

THOMAS MARTIN ASHE,	B. E.,	Raleigh, N. C.
Of Pearson & Ashe, Architects.		
JAMES ADRIAN BIZZELL,	B. S.,	Raleigh, N. C.
Instructor in Chemistry, N. C. College of Agriculture and Mechanic Arts.		
JOHN ISHAM BLOUNT,	B. E.,	Newnan, Ga.
With Cole Manufacturing Co.		
JAMES WASHINGTON BRAWLEY,	B. S.,	Mooresville, N. C.
Traveling Salesman.		
WALTER AUSTIN BULLOCK,	B. S.,	Bainbridge, Ga.,
Manager Brooks Dairy Farm.		
DAVID CLARK (M. E., Cornell Univ.),	B. E.,	Charlotte, N. C.
Secretary and Treasurer Ada Cotton Mills.		
GEO. WASHINGTON CORBETT, JR.,	B. E.,	Raleigh, N. C.
Engineer Raleigh Electric Co.		
EDWIN SPEIGHT DARDEN,	B. S.,	Wilson, N. C.
With Banner Tobacco Warehouse.		
WILLIAM KEARNEY DAVIS, JR.,	B. E.,	Salem, N. C.
Superintendent Southside Manufacturing Co.		
JOSEPH CHARLES DEY,	B. S.,	Norfolk, Va.
Of J. C. Dey & Co., Wholesale Grocers.		
LEE BORDEN ENNETT,	B. S.,	Cedar Point, N. C.
Farmer.		
ISAAC HENRY FOUST,	B. E.,	Charlotte, N. C.
Farmer.		

Name.	*Degree.*	*Address.*
CHARLES WYLLIS GOLD,	B. S.,	Wilson, N. C.
Business Manager *Wilson Times*, Editor *Dixie Dairyman* and *Dairy Farmer*.		
WILLIAM HENRY HARRIS,	B. E.,	Atlanta, Ga.
Assistant Southern Representative, The Draper Co.		
CHRISTOPHER MILLER HUGHES,	B. E.,	Raleigh, N. C.
Clerk N. C. Agricultural Experiment Station.		
MALCOLM BEALL HUNTER,	B. E.,	Philadelphia, Pa.
Textile Designer.		
SAM'L CHRISTOPHER MCKEOWN,	B. E.,	Cornwell, S. C.
Superintendent Machine Shops.		
MANN CABE PATTERSON,	B. E.,	Port Royal, S. C.
Machinist U. S. Government Dock Yard.		
ABRAM HINMAN PRINCE,	B. S.,	Stagville, N. C.
Superintendent of Farm.		
VICTOR VASHTI PRIVOTT,	B. E.,	Edenton, N. C.
With Lumber Company.		
HOWARD WISWALL, Jr.,	B. E.,	Norfolk, Va.
Inspector United States Engineers.		
CHARLES GARRETT YARBROUGH,	B. E.,	Pittsburg, Pa.
With Westinghouse Electric Company.		

CHARLES MARCELLUS PRITCHETT,	M. E.,	Raleigh, N. C.
Instructor in Mechanical Engineering N. C. College of Agriculture and Mechanic Arts.		

CLASS OF 1896.

DANIEL ALLEN,	B. S.,	Raleigh, N. C.
With S. C. Pool's Shoe Store.		
GEORGE STRONACH FRAPS,	B. S.,	Raleigh, N. C.
Ph. D. Johns Hopkins University; Instructor in Chemistry N. C. College of Agriculture and Mechanic Arts.		
MARION JACKSON GREEN,	B. S.,	Victor, N. C.
Assistant in Victor High School.		
JOHN HOWARD,	B. S.,	Tarboro, N. C.
Civil Engineer.		
WILLIAM COLBERT JACKSON,	B. S.,	Ayden, N. C.
With J. R. Smith & Bro.		
ROBERT GRAHAM MEWBORNE,	B. S.,	Richmond, Va.
Assistant Chemist Virginia-Carolina Chemical Co.		
LEVI ROMULUS WHITTED,	B. S.,	Port Royal, S. C.
Assistant Inspector of Dredging.		
HENRY LLOYD WILLIAMS,	B. S.,	Merchant Mills, N. C.
Merchant.		

SAMUEL ERSON ASBURY,	M. S.,	Raleigh, N. C.
See Class of 1893.		
CHARLES BURGESS WILLIAMS,	M. S.,	Raleigh, N. C.
See Class of 1893.		

Name.	*Degree.*	*Address.*
DAVID CLARK,	M. E.,	Raleigh, N. C.
	See Class of 1895.	
WILLIAM HENRY HARRIS,	M. E.,	Charlotte.
	See Class of 1895.	
CHAS. MARCELLUS PRITCHETT,	C. E.,	Raleigh, N. C.
	See Class of 1895.	

CLASS OF 1897.

JOSEPH SAMUEL BUFFALOE,	B. S.,	Nashville, Tenn.
	Medical Student.	
JOHN WILLIAM CARROLL,	B. S.,	Raleigh, N. C.
	Dairyman N. C. College of Agriculture and Mechanic Arts.	
CHARLES EDWARD CLARK,	B. S.,	South Washington, N. C.
	Truck Farmer.	
WM. ALEXANDER GRAHAM CLARK,	B. S.,	Raleigh, N. C.
	Assistant in Civil Engineering N. C. College of Agriculture and Mechanic Arts.	
NICHOLAS LOUIS GIBBON,	B. S.,	Charlotte, N. C.
	With D. A. Tompkins Co.	
CEBERN DODD HARRIS,	B. S.,	Raleigh, N. C.
	Assistant State Chemist.	
JERE EUSTIS HIGHSMITH,	B. S.,	Parkersburg, N. C.
	Farmer.	
CLYDE BENNETT KENDALL,	B. S.,	Raleigh, N. C.
	Civil Engineer.	
JOSEPH LAWRENCE KNIGHT,	B. S.,	Raleigh, N. C.
	Dairyman.	
WALTER JONES MCLENDON, JR.,	B. S.,	Atlanta, Ga.
	With Fulton Bag and Cotton Mills.	
REPTON HALL MERRITT,	B. S.,	Wilmington, N. C.
	With Standard Oil Company.	
ALBERT HICKS OLIVER,	B. S.,	Brevard, N. C.
	Dairyman and Farm Superintendent.	
HUGH WILLIAMS PRIMROSE,	B. S.,	Raleigh, N. C.
	Assistant in Chemistry, N. C. College of Agriculture and Mechanic Arts.	
WILLIAM HUNTER SANDERS,	B. S.,	Raleigh, N. C.
	Assistant Engineer Raleigh Electric Co.	
THOMAS JEHU SMITHWICK,	B. S.,	Raleigh, N. C.
	Assistant in Shop N. C. College of Agriculture and Mechanic Arts.	
LEA WATSON,	B. S.,	Raleigh, N. C.
	Assistant in Mechanical Engineering N. C. College of Agriculture and Mechanic Arts.	
BRADLEY JEWETT WOOTTEN,	B. S.,	Raleigh, N. C.
	Instructor Military Tactics N. C. College of Agriculture and Mechanic Arts.	
JOHN ISHAM BLOUNT,	C. E.,	Ithaca, N. Y.
	See Class of 1895.	
DAVID CLARK,	C. E.,	Raleigh, N. C.
	See Class of 1895.	
LEVI ROMULUS WHITTED,	C. E.,	Port Royal, S. C.
	See Class of 1896.	

CLASS OF 1898.

Name.	*Degree.*	*Address.*
DORSEY FROST ASBURY,	B. S.,	Newport News, Va.
With Newport News Ship Yards.		
SIDNEY HAMILTON BECK,	B. S.,	Newport News, Va.
With Newport News Ship Yards.		
ANSON ELIKEM COHOON,	B. S.,	Raleigh, N. C.
With N. C. Geological Survey.		
HUGH MCCULLOM CURRAN,	B. S.,	Raleigh, N. C
With N. C. Geological Survey.		
BENJAMIN CAREY FENNELL,	B. S.,	Raleigh, N. C.
Post-Graduate Student N. C. College of Agriculture and Mechanic Arts.		
ALPHEUS ROUNTREE KENNEDY,	B. S.,	Fitzgerald, Ga.
Insurance Agent		
FREDERICK CREECY LAMB,	B. S.,	Raleigh, N. C.
Assistant State Chemist.		
EDWIN BENTLEY OWEN,	B. S.,	Raleigh, N. C.
Tutor Sub-Freshman Class N. C. College of Agriculture and Mechanic Arts.		
MOORE PARKER,	B. S.,	Lowell, Mass.
Student Lowell Textile School.		
NUMA REID STANSEL,	B. S.,	Raleigh, N. C.
Instructor in Physics and Electrical Engineering, N. C. College of Agriculture and Mechanic Arts.		
TEISAKU SUGISHITA,	B. S.,	Tokyo, Japan.
Engineer, Imperial Railway of Japan.		
GEORGE FREDERICK SYME,	B. S.,	Raleigh, N. C.
Civil Engineer.		

ROBT. DONNELL PATTERSON, JR.,	M. S.,	Durham, N. C.
See Class of 1894.		

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